

ORIGINAL

BEFORE THE BOARD OF OIL, GAS AND MINING  
DEPARTMENT OF NATURAL RESOURCES AND ENERGY  
IN AND FOR THE STATE OF UTAH

\* \* \* \*

DIVISION OF OIL, GAS AND  
MINING,

Petitioner,

vs.

CO-OP MINING COMPANY,

Respondent.

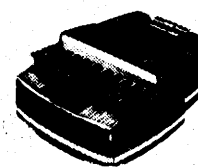
DOCKET NO. 84-040  
CAUSE NO. ACT/015/025

REPORTER'S TRANSCRIPT

\* \* \* \*

On Thursday, July 26, 1984, and on Friday, July 27, 1984, a hearing was held in the above-entitled matter in the Auditorium of the Division of Wildlife Resources, 1596 West North Temple, Salt Lake City, Utah; and said hearing was reported in shorthand by Ronald F. Hubbard, a notary public and certified shorthand reporter in and for the State of Utah (License No. 32).

\* \* \* \*



A P P E A R A N C E S

\* \* \* \*

Board Members

Gregory P. Williams, Chairman  
John M. Garr  
Charles R. Henderson  
Richard B. Larsen  
Constance R. Lundberg

Staff Members

Dr. Dianne R. Nielson, Director  
Ronald W. Daniels, Associate Director for Mining  
Ronald J. Firth, Associate Director for Oil and Gas  
John Baza, Petroleum Engineer  
Marjorie L. Larson, Administrative Assistant

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For Co-op

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Attorney at Law  
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Salt Lake City, UT  
For Co-op



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I N D E X

	<u>D</u>	<u>C-E</u>	<u>RD</u>	<u>RC</u>
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PHILLIP EVERETT HCOPER	65	72	78	
RICHARD V. SMITH	79	94	100	103
WENDELL OWEN	111	125		

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234, #1

1 SALT LAKE CITY, UTAH, THURSDAY, JULY 26, 1984, 11:42 A.M.

2 \* \* \* \*

3 CHAIRMAN WILLIAMS: The next item is Agenda Item 1.  
4 This is the time and place set for the hearing in Docket No.  
5 84-040, Cause No. ACT/015/025, the Division of Oil, Gas and  
6 Mining, Petitioner, vs. Co-op Mining Company, Respondent.

7 The Petitioner is represented by Barbara Roberts of  
8 the Attorney General's Office. The Respondent is represented  
9 by Mr. Ken Rothey and Mr. Carl Kingston. Are you ready to pro-  
10 ceed?

11 MS. ROBERTS: Yes, we are. I am, Mr. Chairman.

12 MR. ROTHEY: The Respondent is ready.

13 CHAIRMAN WILLIAMS: Do either of you wish to make  
14 opening statements?

15 MS. ROBERTS: I would.

16 CHAIRMAN WILLIAMS: Go ahead.

17 MS. ROBERTS: I'm Barbara W. Roberts, Assistant  
18 Attorney General for the State of Utah, representing the  
19 Division of Oil, Gas and Mining.

20 I'd like to just give a little background and maybe  
21 a little idea of what this matter is about. First of all, in  
22 1979 the State of Utah adopted Chapter 10 of Title 40 for the  
23 regulation of coal mining in the State of Utah. The statute  
24 was enacted to minimize the effects of coal mining upon the  
25 environment.





preparation  
↓  
tore to the Division

1 This became at that time the primary statute for the  
2 regulation of coal mining in the State of Utah. It did super-  
3 sede the previous statute, which was Chapter 8 of Title 40.  
4 Chapter 10 is the primary statute, as I said. Chapter 8 con-  
5 tinues to apply except where it conflicts with Chapter 10.

6 The Division of Oil, Gas and Mining was assigned the  
7 duties as the regulatory authority to enforce the statutory  
8 responsibility. Included in the duties assigned by the legisla-  
9 ture ~~to the Division is the direction to prohibit mining without~~  
10 a permit and to establish procedures and requirements for the  
11 preparation, submission, approval, denial, termination, and  
12 modification of applications for coal mining permits.

13 In addition to that particular duty, the legislature  
14 directed that: "No person shall engage in coal mining opera-  
15 tions within the State unless that person has first received  
16 a permit issued by the Division pursuant to an approved mining  
17 and reclamation program."

18 Co-op has not received a permit pursuant to Chapter  
19 10. It operates under the specific conditions that are part  
20 of the regulations that were promulgated pursuant to Chapter  
21 10. Those regulations that I'm referring to at this point are  
22 UMC 771.11 and UMC 771.13(b), and that is on page 55 of your  
23 yellow books.

24 The Division and most of the people involved in this  
25 program refer to this kind of permit as either an interim



1 permit or a temporary permit.

2 Now, according to these conditions that were set out  
3 in the regulations, any operator who fails to submit a timely  
4 and complete application--and when I refer to complete, I refer  
5 to the definition in the regulations on page 52 regarding com-  
6 pleteness--and that means that they had to comply with the re-  
7 quirements of Chapter 10, subchapter G in the regulations, and  
8 any other statutory provisions or regulations that would apply.

9 Or, No. 2: If the permit application had been dis-  
10 approved by the Division, that is also a condition that the  
11 Division may not disapprove and have them continue to mine.

12 Or, No. 3, if the operator has failed to conduct the  
13 activities, its mining activities, in compliance with the terms  
14 and conditions of the interim permit, Chapter 10, the statutory  
15 provisions and regulations.

16 Those are the three conditions that were attached to  
17 the privilege of continued mining once Chapter 10 was enacted.

18 The Division is prepared to prove today that Co-op  
19 has failed to comply with the conditions of UMC 771.11(b)--or,  
20 pardon--13(b); and, therefore, it may not continue to mine  
21 without a permanent program permit, which is a permit issued  
22 under Chapter 10.

23 Now, it has been four years since Co-op has received  
24 its approval for its notice of intent under Chapter 8. That  
25 was issued or approved on June 18, 1980. Since that time the



1 Division has been attempting to work with Co-op to get this  
2 area permitted, to get the information, and so that it may per-  
3 mit this Bear Creek Mine.

4 The Division has focused upon its mandate to evaluate  
5 the effect of coal mining activities upon all of the natural  
6 resources in the area.

7 The Division has set schedules and limits for all  
8 mines in the State which are operating under this conditional  
9 approval. The purpose for setting those deadlines and schedules  
10 was to obtain the critical information, the critical data,  
11 needed to make these evaluations, and in the most expeditious  
12 manner possible. The Division must make these evaluations.  
13 This is a statutory requirement. But beyond the statutory re-  
14 quirement, there is a purpose in attempting to prevent environ-  
15 mental degradation by getting this information and making this  
16 evaluation, so that we can have a direction on how the mining  
17 should proceed.

18 The Division cannot make these evaluations without  
19 this information that is required in the application; and that  
20 is the reason why the Division is bringing this application be-  
21 fore you today, for the purpose of obtaining this information  
22 prior to the possibly preventable resource damage that may be  
23 occurring at this point.

24 That's all I have.

25 CHAIRMAN WILLIAMS: Mr. Rothey.



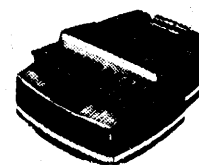
1 MR. ROTHEY: Thank you, Mr. Chairman. Members of the  
2 Board, in connection with this matter, the Chairman will recall  
3 that there was a pretrial scheduling conference wherein all of  
4 the issues were--

5 CHAIRMAN WILLIAMS: Mr. Rothey, would you move the  
6 microphone a little closer?

7 MR. ROTHEY: --wherein all of the issues to be heard  
8 in this case were set forth. Subsequent to that pretrial con-  
9 ference, the Division requested, **without** concurrence, an ex-  
10 tension of time for the purpose of conducting this hearing be-  
11 cause of a submittal made by Co-op on June 28 of this year.  
12 It is my understanding in conference prior to this hearing with  
13 Ms. Barbara Roberts that the issues to be presented to this  
14 Board today within the framework defined at that pretrial con-  
15 ference would be limited to those determinations of incomplete-  
16 ness set forth in a letter dated July 13, 1984, as well as a  
17 subsequent amendment to that of July 17, 1984.

18 In that pretrial conference, Mr. Chairman, it was de-  
19 termined that the foundational issues, the threshold issue, to  
20 be presented by the respondent in this case is the question of  
21 whether the Board has the authority to revoke or suspend the  
22 temporary permit for the reasons set forth in the petition of  
23 the Division as prepared by Ms. Roberts.

24 Contrary to her assertions, Chapter 8 of Title 40 has  
25 never been superseded by the enactment of 10, except as she



1 said, later in qualification, to the extent that Chapter 8 is  
2 inconsistent therewith.

3 No regulation promulgated by the Board pursuant with  
4 Chapter 10 or with Chapter 8 can in any way affect the existence  
5 or continuation of the statute. In other words, the regulation  
6 itself cannot supersede statutory authority. Only the Legisla-  
7 ture or the courts have the authority to do that.

8 As set forth in the provisions of Chapter 8, and par-  
9 ticularly Section 17 thereof, the statutes enacted by the Leg-  
10 islature state that "An approved notice of intention," which  
11 I will represent to this Board is synonymous with the definition  
12 of an interim permit or temporary permit, "an approved notice  
13 of intention or approved revision of it shall remain valid for  
14 the life of the mining operation, as stated in it, unless the  
15 Board shall withdraw such approval as provided in this Act,"  
16 and this Act being 40-8-1, et seq.

17 Subsection 2 says:

18 "The Board or the Division shall not withdraw approval  
19 of a notice of intention or revision of it except as follows,"  
20 setting forth three grounds and conditions on which an interim  
21 permit issued under a notice of intention were in fact issued.

22 "The first of those is that an approval may be with-  
23 drawn in the event that the operator substantially fails to per-  
24 form reclamation or conduct mining operations such that the  
25 approved reclamation can be accomplished."



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1 As interpreted by the respondents in this case,  
2 there is no allegation in this petition presently before the  
3 Board to that effect. The petition before the Board, as narrow-  
4 ly defined in the pretrial conference, was that the respondent  
5 Co-op had in fact acted in bad faith in attempting to meet  
6 deadlines and file their MRP pursuant with the statutes and  
7 regulations promulgated under 40-10 et seq.

8 (B) is: "Approval may be withdrawn in the event that  
9 the operator fails to provide and maintain surety as may be re-  
10 quired under this act or fails to remain financially responsi-  
11 ble."

12 There is no allegation in the petition with respect  
13 to that; and that, of course, was not defined as an issue in  
14 the pretrial conference.

15 (C) "Approval may be withdrawn in the event that  
16 mining operations are continuously shut down for a period in  
17 excess of two years unless such extended period is accepted on  
18 application of the operator."

19 No such allegation in the petition is before this  
20 Board.

21 Now, as Ms. Roberts clearly said, if the provisions  
22 of 40-8-16(2)(a), (b), or (c), and perhaps any or all of those,  
23 if those have been specifically superseded by a provision of  
24 Chapter 10, then we could look to Chapter 10 as a basis for the  
25 revocation of an interim permit granted pursuant to the filing



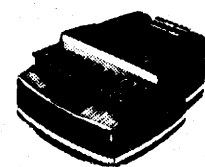
1 of the notice of intention as provided in Chapter 8.

2 Since there is nothing in Chapter 10 that specifically  
3 supersedes that or overrules that, and since there is nothing  
4 in Chapter 10 that's inconsistent with that, it is the position  
5 of the respondent that that statutory authority remains in  
6 effect; and, therefore, the Board's authority to revoke the in-  
7 terim permit is limited to those grounds. The petitioner has  
8 not set forth any of those grounds.

9 The petitioner has, of course, claimed that there is  
10 an act of bad faith and an act that the Co-op people have failed  
11 to timely submit an application, as set forth, and correctly  
12 in the brief, of Ms. Roberts, which we received while I was out  
13 of town.

14 In point of fact, the regulations went into effect,  
15 I believe, in January of 1981, the final regulations. And with-  
16 in two months, as provided in those regulations, the initial  
17 application, the MRP, which is the subject of this petition to-  
18 day, was submitted by Co-op Mines.

19 In point of fact, the MRP in its substantial form was  
20 finally submitted in October of 1983, and the determination of  
21 completeness was issued to Co-op Mines by the Division in March  
22 of 1984, some five months later. We have been undertaking since  
23 then reasonable efforts which we believe are evidence of demon-  
24 strating to try and find out exactly what the Division is assert-  
25 ing in their determination of completeness, so that we can in



1 fact try to meet their requirements and the statute.

2 Ms. Roberts has further asserted, Mr. Chairman, that  
3 all of the mines in the State of Utah are in fact having to com-  
4 ply with this statute. I respectfully submit that there is no  
5 evidence before this Board today and may not be any as to  
6 whether or not all of the mines in the State of Utah that were  
7 operating at the time the regulations became effective have in  
8 fact received final approval or have in fact submitted a com-  
9 plete application. So that whether or not that is an issue be-  
10 fore this Board remains to be seen. It was not an issue that  
11 was raised at the time of the pretrial conference.

12 I have nothing further.

13 Oh, excuse me, I do have. I'm slipping into a lapse  
14 here.

15 One additional point, whether or not it is an issue,  
16 Ms. Roberts submitted a memorandum wherein she has attempted  
17 to define for the Board the question of the burden of proof and  
18 preponderance of the evidence and the burden of persuasion; and  
19 she has cited 5 United States Code, Section 501, et seq., and  
20 specifically quoted subsection (d) there that states on page  
21 6 of her memorandum:

22 "Except as otherwise provided by statute, the pro-  
23 ponent of a rule or order has the burden of proof."

24 And the four periods that follow are not intended to  
25 be emphatic, but, rather, to designate the fact that other





1 things have been left out. She has cited on page 5 immediately  
2 preceding that, Section 40-10-11 of the Utah Code that says:

3 "The applicant for a permit shall have the burden of  
4 establishing that his application is in compliance with all the  
5 requirements of this chapter."

6 I think what we have here is a petition by the Division  
7 to obtain an order of this Board revoking the interim permit,  
8 or establishing a deadline at which time all of the issues of  
9 completeness will have been satisfactorily subjectively met by  
10 the Division and its staff.

11 The issue as I see it before this court clearly is  
12 an issue of an order; and, therefore, the burden of proof still  
13 falls squarely on the shoulders of the Division to establish  
14 that in fact we are doing something that would justify under  
15 the statutes a revocation of that interim permit.

16 Thank you.

17 CHAIRMAN WILLIAMS: Would you go ahead, Ms. Roberts.

18 MS. ROBERTS: I have three witnesses. Mr. Chairman,  
19 I would like to have them all sworn at the same time. They are  
20 Dr. Dianne Nielson, Richard Smith, and Everett Hooper, from the  
21 Division.

22 (Three witnesses were duly sworn to testify.)

23 DIANNE RUTH GERBER NIELSON

24 called as a witness on behalf of the Division, having  
25 been duly sworn, testified as follows:



place / play  
↓

DIRECT EXAMINATION BY MS. ROBERTS

Q Dr. Nielson, will you state your name and business address and place of employment?

A My name is Dianne Ruth Gerber Nielson. I am Director of the Division of Oil, Gas, and Mining of the State of Utah. The business address is 4241 State Office Building, Salt Lake City, Utah 84114.

Q What is your title?

A I am Director of the Division of Oil, Gas, and Mining.

Q Dr. Nielson, will you give us a little background on the regulation of coal mining in the State, beginning with the enactment of the federal law?

A Okay. In 1977 the federal government enacted the Surface Mine Control Reclamation Act, the purpose of which was to establish nationwide protection for the public and the environment from the surface effects of underground coal mining and the surface effects of surface coal mining within the United States. That law provided that each state would have an opportunity within a given time period to prepare a state program that would be consistent with the federal regulations for regulating coal on nonfederal, non-Indian lands within its state boundaries; and it also provided that each state government could through the issuance of a cooperative agreement issued by the Office of Surface Mining, Department of the Interior, assume the responsibilities for directions of those activities on federal



1 lands.

2 In 1979, Chapter 10 was adopted as a basis for this regu-  
3 lation in the state. In 1981, in January of 1981, the state  
4 achieved primacy from the federal government for the state pro-  
5 gram regulating coal activities on nonfederal, non-Indian lands  
6 within the State of Utah.

7 Q When was the Co-op Mining Company Issued their notice of  
8 intent--or, had their notice of intent approved?

9 A In June of 1980, Co-op Mining was issued approval and a  
10 notice of intent for mining at the Bear Canyon Mine.

11 Q Would you explain a little bit about what primacy entails  
12 with the state?

13 A In achieving primacy, there were a number of deadlines that  
14 automatically came into effect. One was that any operating mine,  
15 a mine that was operating at the time that primacy was granted,  
16 had a two-month period or window within which to apply for--or,  
17 make application--with the Mine Reclamation Plan for a perma-  
18 nent program permit to mine coal within the State of Utah.

19 This application was to be reviewed with the permanent pro-  
20 gram permit issued eight months from the time period that the  
21 application was initially received. It became obvious as a  
22 number of states, including Utah, got into the permit review  
23 and granting process that it was not able to meet--that it was  
24 not possible to meet this eight-month window, or this eight-  
25 month deadline. And, therefore, the Utah program, in concur-



1    rence with the provisions of the federal program, granted ad-  
2    ministrative delay to companies who had filed an application,  
3    but in situations where the Division had been unable to complete  
4    the review of that application within the eight-month period.  
5    And those companies were allowed to continue mining under the  
6    state program, or under the federal program, as operated  
7    through the state, during the period that that application was  
8    being reviewed, and in accordance with the statute and regula-  
9    tions as set down in the state.

10   Q     Dr. Nielson, did the Division in fact set up schedules by  
11   which each mining company was to comply to make their MRP com-  
12   plete?

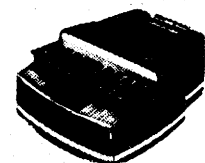
13   A     Yes, that's true.

14                               (Exhibits A and B were marked  
                              for identification.)

15   Q     I have here what has been marked Exhibit A, which in your  
16   Board books was previously Exhibit 5. I have re-marked these.  
17   I do have them marked for the original file, however. This is  
18   a letter dated July 14, 1983. And also Exhibit B, which is a  
19   letter dated November 8, 1983, from the Division of Oil, Gas,  
20   and Mining to Mr. Wendell Owen. Are those examples of the  
21   scheduling setups that have been enacted by the Division, put  
22   into process by the Division?

23   A     Yes, that's true.

24   Q     Specifically in the July 14, 1983, there is a statement  
25   referring to a schedule that was set up for a determination of



1 completeness for the order of 1984. I am sorry that I couldn't  
2 have the original schedule, but I haven't been able to put my  
3 hands on it. However, that schedule later was pushed back; and  
4 in the November 8, 1983, exhibit that schedule was affixed with  
5 a table.

6 CHAIRMAN WILLIAMS: Do you have copies of those?

7 MR. ROTHEY: I am checking.

8 (Ms. Roberts hands to Mr. Rothey.)

9 MS. LUNDBERG: Do you have any other copies of your  
10 November 8 letter?

11 MS. ROBERTS: I'm sorry. That is just something that  
12 was--it was kind of difficult to put our hands on some things,  
13 and I just happened to find that one in somebody's file.

14 MS. LUNDBERG: Would you get a copy of that made for  
15 us right away?

16 MS. ROBERTS: I would.

17 Q (By Ms. Roberts) Dr. Nielson, could you give us an idea  
18 of what the purpose of the schedules was?

19 A The purpose of the schedule was to provide a workable  
20 framework for evaluation of the Mining Reclamation Plan by the  
21 Division, responses to the operators, and responses back in  
22 terms of those evaluations to the Division, within a workable  
23 time frame, so that the Division could make the determinations  
24 as required by statute rules and regs of the Division and ul-  
25 timately grant a permanent program permit for mining of coal.



1 Q Were the operators apprised of the consequences of failing  
2 to meet these schedules?

3 A Yes. This was specifically indicated in the November 8,  
4 1983, letter which accompanied the schedule for each mine oper-  
5 ation that was at that point under an interim permit.

6 (Exhibits C, D, and E were marked  
7 for identification.)

8 MS. ROBERTS: In addition, we have State's Exhibits  
9 C, D, and E which also are letters from the Division of Oil,  
10 Gas, and Mining to Co-op Mining, indicating the consequences  
11 of failing to meet schedules.

12 CHAIRMAN WILLIAMS: Would you identify those?.

13 MS. ROBERTS: I would. They are prior Exhibit 6,  
14 which is C--

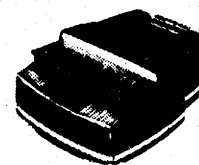
15 CHAIRMAN WILLIAMS: What is the date?

16 MS. ROBERTS: A letter dated September 2, 1983.  
17 Exhibit D is a letter dated September 22, 1983, which is prior  
18 State Exhibit 7. And Exhibit E is a letter dated April 12,  
19 1984; and that, again, was---it's not previously been filed.  
20 And we will get copies of that one also.

21 CHAIRMAN WILLIAMS: These are all letters from the  
22 Division to Co-op?

23 MS. ROBERTS: That's correct.

24 Q (By Ms. Roberts) Dr. Nielson, would you explain the  
25 difference between completeness and technical adequacy or  
technical analysis?



1 A Completeness is defined, as previously indicated, under  
2 UMC 770.5 under Definitions.

3 CHAIRMAN WILLIAMS: Excuse me. Would you identify  
4 the page for us?

5 THE WITNESS: On page 52. I apologize. The bottom  
6 of that page.

7 "A complete application means an application for  
8 exploration approval or permit which contains all information  
9 required under the Act, this subchapter, and the regulatory pro-  
10 gram."

11 Technical adequacy is the determination and evalua-  
12 tion--the determination based on a technical evaluation of the  
13 technical data presented by the operator to the Division. The  
14 purpose of this evaluation is to insure that the mining and  
15 reclamation plan that is submitted by the operator is sufficient  
16 in its technical definition and implementation to enable the  
17 operator to not only mine, but later reclaim his operations in  
18 accordance with the Act and in a manner that protects the pub-  
19 lic and the environment.

20 So the technical adequacy becomes an evaluation of  
21 whether indeed the plan for mining and reclamation as presented  
22 by the operator will indeed achieve the goals set out and re-  
23 quired by the Act, the objectives which the Division has statu-  
24 tory responsibility to insure.

25 Q (By Ms. Roberts) Dr. Nielson, the Division has done



1 several reviews on Co-op Mining Company's mining and reclama-  
2 tion plan. We have for the Board's information simplified the  
3 chronology on this chart here. Would you just step over there  
4 and explain it.

5 A The purpose of this chart is to outline for the benefit  
6 of this hearing the procedures that the Division followed with  
7 Co-op Mining Company in attempting to make the initial deter-  
8 mination--the determination of completeness--with regard to this  
9 mining reclamation permit application.

10 As we have previously discussed, June 18, 1980, an interim  
11 permit was granted, and approval and intent, by the Division  
12 for Co-op Mining's Bear Canyon Mine. January 21 of 1981, the  
13 State was awarded primacy, as also previously indicated.

14 March 23, within the required two-month period, Co-op  
15 Mining submitted a mining and reclamation plan to the Division  
16 for their mining activities of the Bear Canyon Mine.

17 December 10, 1981, the Division completed the determina-  
18 tion, notified--or, made the determination--I'm sorry--that the  
19 mine and reclamation plan was deficient. There was an October  
20 4, 1982, meeting between the Division of Oil, Gas, and Mining  
21 and Co-op to discuss specific deficiencies with regard to that  
22 mining and reclamation plan.

23 There was an October 25, 1982, letter following that meet-  
24 ing, which summarized those discussions and outlined the de-  
25 ficiencies that existed. November 15 of 1982, Co-op Mining



↓ sorry -- that



1 again responded to mining and reclamation plan deficiencies  
2 that had been addressed in that previous meeting. On February  
3 4 of '83 the Division again, upon review of that response,  
4 found that the MRP was deficient.

5 July 29, 1983, Co-op Mining again responded to those de-  
6 ficiencies as outlined in that previous correspondence. And  
7 September 2 of 1983, the Division again found that that response  
8 was not sufficient and that the mining and reclamation plan re-  
9 mained deficient.

10 October 26 of 1983, Co-op again responded with regard to  
11 those deficiencies in the mine and reclamation plan. November  
12 8, the Division issued a compliance schedule, which is Exhibit  
13 B as presented here, establishing a firm schedule for the bene-  
14 fit of the operators, as well as the Division, to enable them  
15 to proceed to a determination of completeness, then a technical  
16 analysis, and finally the issuance of an approved permanent  
17 program permit for the Bear Canyon Mine. The schedule was sub-  
18 mitted to Co-op Mining Company, and they were clearly made  
19 aware of the implications of not complying with that schedule.

20 March 27, 1984, was the deadline on that schedule for sub-  
21 mission of the information necessary to provide the Division  
22 with a complete response, so that they could make a determina-  
23 tion of completeness with regard to that mining and reclama-  
24 tion permit application. The Division received that response,  
25 found it deficient. On April 2 the Division held a meeting at



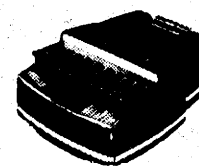
1 our offices with representatives of Co-op Mining Company and  
2 went over the deficiencies as outlined in that March 27 review.

3 It was on the basis of that review that the Division again  
4 granted Co-op Mining Company an opportunity beyond the schedule  
5 previously established to provide additional information to make  
6 that application complete, so that the Division could make the  
7 determination of completeness. The deadline for that response  
8 was April 30, 1984. On April 30, the Division received addi-  
9 tional information and response from Co-op Mining Company. That  
10 was reviewed and May 11 of 1984, it was determined by the  
11 Division that the information provided was still deficient and  
12 that a determination of completeness could not be positively  
13 made for the Co-op Mining Company's Bear Canyon Mine.

14 It was at that point that we came with a petition to the  
15 Board, and we find ourselves today in this review.

16 Following that date, as you're aware, the Division also  
17 performed an additional review on information, responses, from  
18 Co-op Mining Company to the Division to further attempt to  
19 complete their application. That was received a few days be-  
20 fore last month's Board hearing. The Division reviewed that.  
21 And on the 12th of July, following addendum on the 17th of  
22 July, the Division still found that the application was incom-  
23 plete and that a determination of completeness could not be  
24 positively made.

25 Q Dr. Nielson, did you say that that submittal was received



1 a few days before the last Board hearing?

2 A It was received on a Monday. The Division staff were  
3 handed maybe six copies, I think, of a response from Co-op  
4 Mining Company. It was not accompanied by a formal letter to  
5 the Division, but it was provided to the staff on the Monday  
6 prior to that Thursday Board hearing.

7 MS. ROBERTS: Thank you. You can sit down.

8 CHAIRMAN WILLIAMS: Do you intend to introduce the  
9 chart as an exhibit?

10 MS. ROBERTS: I'm sorry. Mr. Chairman, that would  
11 be State Exhibit J. I've not marked it, but it will be State  
12 Exhibit J.

13 (Exhibit J was marked for identification.)

14 Q (By Ms. Roberts) Dr. Nielson, we've talked about complete-  
15 ness and adequacy. On the sections where Co-op has been deter-  
16 mined complete, does that mean that those sections will not be  
17 reviewed, or does that mean that those sections are also de-  
18 termined to be technically adequate also?

19 A No. The determination of completeness and the determina-  
20 tion of technical adequacy through the technical analysis are  
21 two distinct determinations. The purpose of the determination  
22 of completeness is simply to indicate that the division has  
23 sufficient information within the mining and reclamation permit  
24 application to proceed with the technical analysis and to make  
25 a determination as to additional technical information which



1 may be needed in some cases or to make a determination of  
2 technical adequacy in other situations.

3 But the determination of completeness is simply a recogni-  
4 tion of the necessary types of information, as required, are  
5 available within the permit application. The technical anal-  
6 ysis is then the basis for determining whether that information  
7 is adequate for the permit.

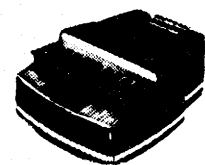
8 Q So, in other words, there may be many more sections that  
9 the Division will have to review for the adequacy later on?

10 A That's true. At this point we don't know what the addi-  
11 tional--what all of the additional needs may be in terms of  
12 technical evaluation. We are simply concerned with being able  
13 to make that initial determination that the basic information  
14 is available somewhere in the plan on which to justify the  
15 mining and reclamation program.

16 Q And has the Division indicated to Co-op some of the pos-  
17 sible deficiencies in the sections remaining?

18 A Yes. When the Division does the review which is the basis  
19 for making a determination of completeness, the Division also  
20 considers what are technical deficiencies. So they do ACR/TD  
21 or a completeness review, technical deficiency review.

22 The purpose of this is simply to indicate to the operator  
23 that while our concern right now is being able to make the de-  
24 termination of completeness in the process of reviewing for  
25 completeness, there are certain glaring issues in terms of



1 technical deficiency which the Division is aware of. We wish  
2 to make the operator aware of those deficiencies and allow him  
3 as much time as possible to provide the additional information  
4 necessary when we move into the technical analysis portion of  
5 the approval.

6 MS. ROBERTS: At this time the State would like to  
7 enter State Exhibit F, which is the determination of complete-  
8 ness technical deficiency document, with a cover letter dated  
9 March 27, 1984. The DOC/TD itself is dated March 30, 1984,  
10 but that is one exhibit. And that is State Exhibit F.

11 State Exhibit G is the determination made on May 11,  
12 1984. That will be State Exhibit G. It has a cover letter  
13 dated May 29, 1984.

14 State Exhibit H, which is the July 13 memorandum  
15 from Mary Boucek to Dianne Nielson regarding the latest sub-  
16 mittal, the review of the latest submittal from Co-op.

17 And State Exhibit I, which is a letter from the  
18 Division to Co-op dated July 18, 1984. That is the addendum  
19 that we are referring to on the--something that has been left  
20 out of the July 13 letter.

21 (Exhibits F, G, H and I were  
22 marked for identification.)

23 Q (By Ms. Roberts) One further question, Dr. Nielson.  
24 Would you give us an idea--

25 MR. ROTHEY: Excuse me. We have no objection to



1 the admission of those.

2 CHAIRMAN WILLIAMS: To any of the exhibits?

3 MR. ROTHEY: Those that she's just identified, F, G,  
4 H, and I.

5 CHAIRMAN WILLIAMS: Thank you.

6 (Exhibits F, G, H, and I were  
7 received in evidence.)

8 Q (By Ms. Roberts) Would you give us an idea, in comparing  
9 Co-op Mining Company to the other operators in the State regard-  
10 ing repermitting, would you give us an idea on how they might  
11 differ or might be similar in their repermitting--I don't  
12 want--let me rephrase that. Mr. Rothey brought up the issue  
13 as to the other operators in the State on whether they were in  
14 compliance or not in compliance and where they were and what  
15 states of repermitting they were. Would you give us an idea  
16 of how Co-op fits into the regime?

17 A At the time that the State obtained primacy and began  
18 these reviews, and further, at the November 8, 1983, period  
19 when the State issued letters to remaining operators who had  
20 interim permits issued, in each case schedules for submission  
21 of information to enable the Division to make their determina-  
22 tions and finally grant permanent program permits, there were  
23 a number of mines that were operating in an active status with  
24 interim permits. There are a total of 29 operations within the  
25 State of Utah which are in one way or another either active  
mines with permanent program permits, active mines with interim



1 permits, mines which are suspended, or where there is new de-  
2 velopment, with permanent program permits, and mines where  
3 there are suspended activity which have interim program permits.  
4 Of the active mines, there are 20. Five of the active mines  
5 currently have permanent program permits. Fifteen of those 20  
6 are in one stage or another of review of a permanent program  
7 permit application and point the issuance of that permanent pro-  
8 gram permit.

9 Of those operations, there is only one mine and one company  
10 which we have been unable to make a positive determination of  
11 completeness at this stage, and that is Co-op Mining's Bear  
12 Canyon's Mine. All of the other operators have provided infor-  
13 mation sufficient for us to make a determination of complete-  
14 ness; and while they are still operating under interim permits,  
15 are in one stage or another of the technical analysis or are  
16 awaiting final approval jointly from either federal and state  
17 entities or in the case of nonfederal mines, from the state,  
18 in terms of approval of their permanent program permit. Co-op  
19 Mining Bear Canyon's Mine is the only active coal property in  
20 the State of Utah on which we have been unable to make a posi-  
21 tive determination of completeness, even with the slippages  
22 in the November 8, 1983, special.

23 Q Has the Division made negative determinations on complete-  
24 ness on any other mine in the State?

25 A Yes, we have.



1 Q What are those mines?

2 A The Knight Mine was determined to be incomplete. The  
3 mine is not operating at this point. The Division has at the  
4 request of the operators also revoked administrative delay in  
5 the case of U. S. Steel's Geneva Mine, and in the case of Co-  
6 op Mining's Trail Canyon operation. There are other mines  
7 which are in suspended state at this point, and I can go into  
8 additional status on those as required.

9 MS. ROBERTS: I don't think that's necessary at this  
10 time. I have no further questions of Dr. Nielson.

11 CHAIRMAN WILLIAMS: Mr. Rothey, did you have any  
12 objections to Exhibit A, B, C, D, or E?

13 MR. ROTHEY: I have of B and E.

14 MS. ROBERTS: The rest of them were prefiled.

15 MR. ROTHEY: Thank you. I have no objections to any  
16 of those exhibits.

17 CHAIRMAN WILLIAMS: What about Exhibit J?

18 MR. ROTHEY: No objection to Exhibit J, which is the  
19 flow chart of meetings, DOC's and submittals by the Division  
20 of Co-op.

21 CHAIRMAN WILLIAMS: We will receive A, B, C, D, E,  
22 and J. And we will recess until 1:30.

23 (Exhibits A, B, C, D, E, and J  
24 were received in evidence.)

25 (Noon recess from 12:03 p.m. until 1:30 p.m.)

\* \* \* \*





1 SALT LAKE CITY, UTAH, THURSDAY, JULY 26, 1984, 1:30 P.M.

2 \* \* \* \*

3 CHAIRMAN WILLIAMS: We will resume our consideration  
4 of Docket 84-040. Ms. Roberts, did you have any further ques-  
5 tions of Dr. Nielson?

6 MS. ROBERTS: I do not, Mr. Chairman.

7 CHAIRMAN WILLIAMS: Mr. Rothery.

8 MR. ROTHEY: Thank you, Mr. Chairman, Members of the  
9 Board.

10 CROSS-EXAMINATION BY MR. ROTHEY

11 Q Dr. Nielson, you stated in your examination that you are  
12 presently the Director of the Division of Oil, Gas, and Mining;  
13 is that correct?

14 A Yes, sir.

15 Q How long have you been the director?

16 A Since October 31, 1983.

17 Q So for approximately a period of eight months, is that  
18 correct?

19 A Yes, sir.

20 Q You succeeded Dr. Shirazi, is that correct?

21 A Shirazi.

22 Q Do you know how long he was the director, then?

23 A It's my understanding since, I think, sometime in March  
24 of '83.

25 Q Since March of '83?



1 A Yes.

2 Q Then there apparently was a director who preceded Dr.  
3 Shirazi?

4 A Yes, that's true.

5 Q Is it fair to say, Dr. Nielson, that in the short time  
6 that you have been the director of the Division of Oil, Gas,  
7 and Mining that the personnel in the Division have turned over,  
8 as we use the term in lay language; that you have had a lot of  
9 people come and go from that Division?

10 A I guess that's somewhat of a subjective determination as  
11 to what you would term a lot of people; but, no, considering  
12 that we have a staff of 84, I think we have had a rather small  
13 turnover actually in that period.

14 Q In the eight-month period of time?

15 A Uh huh.

16 Q As I understood your testimony, the State of Utah obtained  
17 primacy or principal oversight authority for approving of MRP's  
18 both with respect to the state-owned ground and private ground,  
19 Indian ground, and government ground in January of '81; is that  
20 correct?

21 A No. The state received primacy in terms of the state  
22 program on nonfederal, non-Indian property. The state **currently**  
23 **operates** under a funding cooperative agreement, which grants  
24 authority from the Office of Surface Mining to regulate, includ-  
25 ing granting permits and conducting inspections for enforcement



it's the  
↓  
state currently operates

1 on federal lands.

2 Q So that you presently have primacy as it relates to  
3 MRP's on both federal and private ground, state ground?

4 A I don't know that--the reason I hesitate is that I'm not  
5 sure that the funding cooperative agreement would necessarily  
6 be qualified as a primacy. We have authority by virtue of  
7 primacy granted by the Office of Surface Mining, Department of  
8 Interior, for being the regulatory agency or assuming all re-  
9 sponsibilities of the regulatory agency on nonfederal, non-  
10 Indian lands.

11 We have authority under a funding cooperative agreement  
12 to perform those same responsibilities for the federal govern-  
13 ment on federal lands, but I don't think that the latter is  
14 necessarily referred to as a primacy.

15 Q All right. Referring specifically to the area of regula-  
16 tion of state land--

17 A Yes.

18 Q --which would--

19 A We have primacy for state lands.

20 Q And that encompasses the Co-op MRP's; is that correct?

21 A That's correct.

22 Q Is there presently pending any limitation or deadline from  
23 the Office of Surface Mining as it relates to the Division of  
24 Oil, Gas, and Mining whereby DOGM, if I can use that term, must  
25 approve all pending MRP's by a certain date?



1 A On all properties?

2 Q On all State properties where you have primacy.

3 A There is not a regulation that dictates that that must be  
4 completed by a deadline. There has been an agreement by the  
5 State with OSM that we will proceed as expeditiously as pos-  
6 sible to complete the permitting process on all interim permits  
7 on State lands within the State of Utah, with the realization  
8 that it is the responsibility under State regulatory authorities  
9 that we make certain determinations in terms of completeness  
10 and in terms of technical analysis to insure that a company  
11 which has an interim permit and which is conducting mining op-  
12 erations performs those activities and is capable of perform-  
13 ing the reclamation as proposed.

14 Q That agreement in fact requires you to achieve a complete-  
15 ness review and a technical review of the pending 15 MRP's by  
16 July 29 of this year, doesn't it?

17 A No, it does not.

18 Q Is there a deadline imposed in that agreement?

19 A There is an understanding that we would attempt to pro-  
20 ceed on a deadline--or, on a schedule with the deadlines that  
21 we established in November of 1983.

22 Q It was, frankly, as a result of that agreement between  
23 DOGM and OSM that the schedule that you have set forth on  
24 Exhibit J dated November 8, 1983, was promulgated; isn't that  
25 correct?



1 A That's true.

2 Q So that at that time, the Division was under some type of  
3 pressure or directive from OSM to get final approval on the  
4 pending MRP's State ground?

5 A I think it's important to realize the pressure that OSM  
6 exerts on the State on State permits is a pressure not of the  
7 authority of OSM to set deadlines that the State must adhere  
8 to, but it is rather the pressure of requiring the State to  
9 operate responsively within its authorities and in accordance  
10 with its responsibilities and dictates by virtue of the primacy  
11 agreement that it has. If we were operating on federal lands,  
12 yes, OSM would have the ability to set specific stringent dead-  
13 lines.

14 Q Well, let's get away from the federal lands--

15 A When we are talking about State lands, though, it is the  
16 deadlines--the deadlines become not specifically directed or  
17 dictated time periods as much as they become a realistic frame-  
18 work for the State to attempt to meet its obligations and  
19 operate within its statutory requirements in terms of carrying  
20 out the dictates of the law.

21 Q Is there any threat or statute, regulation or otherwise,  
22 by agreement with OSM where DOGM would lose its primacy on  
23 State lands if it doesn't achieve certain guidelines and dead-  
24 lines?

25 A Certainly.



1 Q Is that one reason why this petition has been filed?

2 A I'm sorry. Would you restate that question?

3 Q Would that possibility of a revocation or deprivation of  
4 your authority in the Division of Oil, Gas, and Mining to con-  
5 tinue primacy supervision of State lands be one reason why  
6 this petition has been filed?

7 A No, I think it's unlikely that an action regarding one  
8 specific mine operation within the State of Utah would form a  
9 basis of revocation by OSM.

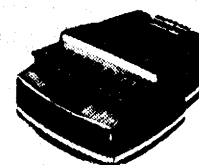
10 Q Do you know if your office has any responsibility to notify  
11 OSM of hearings such as this?

12 A Yes, certainly, we do.

13 Q And that would be the reason why persons representing  
14 the interests of OSM are here today observing this hearing; is  
15 that correct?

16 A No, sir. The notifications go to the Albuquerque Office  
17 of OSM, and the individual--the individual that I'm aware of  
18 that is in the audience today from OSM is here simply because  
19 he was in Salt Lake for another meeting with our Division yes-  
20 terday totally unrelated to this matter; and it's my understand-  
21 ing that he chose to stay over. I don't mean to speak for him,  
22 and I wouldn't attempt to provide that as his justification for  
23 being here, but that is my understanding of why he is here at  
24 this time.

25 Q All right. Thank you. You, from the testimony you have



1 given, both, if I can recall the direct and cross, you have  
2 been the director of the Division during the periods of time  
3 when the March--this says March 27--but in fact, the MRP is  
4 dated March 30--both that MRP and the DOC, as it is called, the  
5 determination of completeness, the May 11 determination of  
6 completeness, and the most recent, July 13 and July 18 deter-  
7 mination of completeness have been prepared; is that correct?

8 A Yes, that is correct.

9 Q Do you have direct supervisory responsibility over the  
10 personnel who have reviewed this MRP of Co-op Mine?

11 A That is correct.

12 Q You are no doubt aware then in the determination of com-  
13 pleteness and technical deficiencies that was submitted to  
14 Co-op Mine under cover of letter dated March 27, '84, the DOC  
15 and TD, which was attached to and dated March 30 of '84, that  
16 there is a reference therein stating that anything in this  
17 DOC/TD with an asterisk indicates that it had previously been  
18 addressed in other DOC's? You're aware of that?

19 A Yes. That is a notation on page 26 of the March 30, 1984,  
20 document that was prepared by the Division.

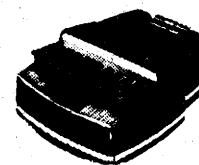
21 Q 26 is the last page of that? Is that correct?

22 A It's my understanding it is, yes. It's the last page I  
23 have.

24 Q Have you had any occasion to determine in your review of  
25 those aspects of that correspondence relating only to deter-



1 mination of completeness, how many of those items did not have  
2 an asterisk and how many of them did have an asterisk?  
3 A I'm sorry. Are you asking if I read the document and rec-  
4 ognized which were asterisks and which were not?  
5 Q Yes.  
6 A Yes, I did.  
7 Q Would it be fair to say that as a general statement that  
8 at least half of the items set forth in the March 30 DOC were  
9 in fact raised for the first time in that DOC?  
10 A I would have to go back and count them. I don't know  
11 whether that is a correct statement or not.  
12 Q Well, if you don't know, you need not answer. I'm not  
13 asking you to take this Board's time to do that, unless you--  
14 well, if you don't know, you need not answer. You have in fact  
15 reviewed with your staff the July 13 determination of the com-  
16 pleteness, or ACR, as you have previously called it; is that  
17 correct?  
18 A That's true.  
19 Q Referring specifically to that July 13, 1984, DOC, in-  
20 completeness response, I refer you to that paragraph which  
21 begins, "UMC 783.15, Ground Water Information."  
22 A Excuse me. Could you give me just a minute to find that?  
23 Q Yes.  
24 A Thank you.  
25 I am sorry. Would you give the quotation again?





1 Q UMC 783.15, Ground Water Information.

2 A Uh huh.

3 Q In reviewing this incomplete response statement dated  
4 July 13, did you talk to Mary Boucek? Did you talk to her at  
5 all about her review of the MRP?

6 A I discussed the preparation of this document with Mary and  
7 her staff.

8 Q Did you discuss with her the inclusion in Appendix 7A the  
9 testimony of Bruce Callister of the State of Utah?

10 A I don't know that we specifically discussed it with regard  
11 to this issue. I'm aware that there was testimony made.

12 Q All right. You are aware that that testimony is included  
13 as an exhibit in the MRP, are you not?

14 A Yes, I am.

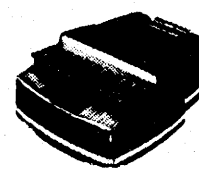
15 Q You are also aware of the memorandum filed by Ms. Roberts  
16 in this case, I take it?

17 A Yes.

18 Q And you are aware that in the findings, conclusions, and  
19 order of this Board as it relates to the interim permit or  
20 notice of intent that the order of this Board was specifically  
21 as follows:

22 "Evidence has demonstrated that no material damage to the  
23 hydrologic balance will be caused by the approval of the pro-  
24 posed notice of intent to mine."

25 You are aware of that?



Administrative practice as it

1 A Yes, I'm aware of that statement.

2 Q Now, with respect to your definition here today, both from  
3 the statute as it relates to completeness and from your **administra-**  
4 **tive practice as it relates to technical deficiencies**, are you  
5 telling this Board that its order finding that there would be  
6 no material damage to the hydrologic balance and the inclusion  
7 of all of the testimony of Mr. Callister, who has been identified  
8 both by name, address, and division, and his position, that that  
9 is not apparently a complete response as it relates to the hydro-  
10 logic balance and the impact as it relates to this MRP?

11 A That's true.

12 Q Simply stated, it is true. What position did the Division  
13 take with respect to the order of this Board as it relates to  
14 that finding?

15 A I'm sorry. I'm afraid I don't understand your question.

16 Q You have testified here today, and Ms. Roberts has re-  
17 counted to the Board, that one of the principal purposes of the  
18 statute is to protect the public and the environment. Of  
19 course, in terms of answering or responding to the question of  
20 hydrologic damage, you would then be concerned with the issue  
21 of whether material damage would result to the hydrologic  
22 balance? Isn't that correct?

23 A The question that we are addressing today is not the  
24 determination technically of whether the information that is  
25 provided is adequate. The determination is whether there is



1 sufficient information which has been provided to form a basis  
2 for evaluating that decision.

3 Q All right. As part and parcel of that, of course, you have  
4 cited certain regulations which state that the vertical and  
5 horizontal extent of any known aquifers have not been defined;  
6 is that correct?

7 A We have indicated that there is not sufficient information  
8 in your permit application for us to determine that section com-  
9 plete.

10 Q So as it relates to page 7 of Mr. Callister's testimony,  
11 where he says, beginning there and continue on page 8:

12 "I think what happens to the north, where principally the  
13 snow accumulates on Gentry Mountain, there is a recharge that  
14 is vertical down to the water table, through the Blackhawk, and  
15 there is a recharge also from those channels which are from those  
16 drainages which are lying along the joint and the fault bed.  
17 That vertical migration then reaches the star point and travels  
18 laterally along the shear zones, prominent joints, or faults,  
19 and emerges where the topography dissects the formation. I  
20 think all this is happening well below the mine."

21 You are aware of that?

22 A I am aware that Mr. Callister entered that testimony, yes.

23 Q And you are aware that that was included as Exhibit 7A in  
24 the MRP at least as early as October 1983?

25 A That's correct.



mine/line | ↓ shear

1984, ↓  
↓ 1984

1 Q Referring again to the letter of July 13, 1984, the  
2 paragraph headed UMC 783.24, Maps, General Requirements, it  
3 states on the second page:

4 "The requirements under this regulation were determined  
5 to have been unsatisfactorily addressed by the applicant and  
6 were so addressed in the Division's March 30, 1984, DOC/TD docu-  
7 ment. The inconsistency in permanent area boundaries was not  
8 brought to light in the May 11, 1984, Division memorandum (M.  
9 Boucek to D. Nielson) and was detected during the staff's man-  
10 dated review of the June 25, 1984, submittal by Co-op."

11 Can I take it from that, Dr. Nielson, that there has been  
12 at least two maps submitted as it relates to the general re-  
13 quirement, but that those maps are inconsistent with each  
14 other?

15 A I guess to specifically answer this, it might more appro-  
16 priately go back to technical staff on the basis of their re-  
17 view.

18 Q Is that because it's a technical question?

19 A No. It isn't because it's a technical question. It's be-  
20 cause this specific portion of the discussion that we're in right  
21 now relates to an evaluation that was done by one of my tech-  
22 nical staff members, and I don't specifically right here have  
23 the maps with me. They could much better describe what they  
24 saw as the problems in those maps. There are maps on the wall,  
25 and I think that they are probably--that one of the other



1 witnesses would probably be a better individual to address  
2 specific problems relative to the inconsistencies discussed here.

3 Q But it is fair to say that you did review it before it  
4 was sent out?

5 A Yes, I did review it, and it's my understanding that there  
6 was information that we had received and that during the later  
7 review it became obvious that there were inconsistencies in the  
8 information, that it was not consistent with what we had earlier  
9 understood were the facts as presented in the application. But  
10 to go more than that, I would prefer to defer and give you a  
11 better answer from one of the other witnesses.

12 Q Would would that be, Dr. Nielson?

13 A I would assume Rick Smith.

14 Q Rick Smith?

15 A Yes.

16 Q Thank you. In the introductory paragraph to this MRP, it  
17 states in the last sentence to the introductory paragraph:

18 "Should the reviewer encounter any disparity in informa-  
19 tion presented herein as compared to previous submittals, this  
20 is to be considered the correct version."

21 Did you review that with the staff?

22 A I'm aware the statement is there.

23 Q All right. With respect to paragraph UMC 783.24, in re-  
24 viewing that did you determine with the staff in Section 3,  
25 plate 3-3 of the MRP that in fact the Trail Canyon Mine, which



↓ 3-3 / 3.3

1 is in an area adjacent to the Bear Canyon mining area, was  
2 in fact identified and its layout set forth in that map?

3 A In a map that was provided for the Bear Canyon property?

4 Q Yes.

5 A I don't recall whether there was an outline of Trail  
6 Canyon or not. I have to go back and see. We had discussed  
7 maps for the Bear Canyon review, but I don't recall that spec-  
8 ific map.

9 Q Have you discussed any other mines that would lie in an  
10 area adjacent to this proposed MRP--

11 A I'm aware--

12 Q --with the staff?

13 A I'm aware that there are other mines, or proposed mines,  
14 in the general geographic area of this MRP, and I'm aware that  
15 the Trail Canyon Mine is adjacent on the western boundary in  
16 part to the Bear Canyon Mine.

17 Q You in fact in consultation with your staff have only  
18 recently proposed and promulgated a change in the regulatory  
19 authority that you have to the definition of adjacent area;  
20 isn't that correct?

21 A We have--yes. We have proposed a change in that within  
22 recent times.

23 Q And that change would, of course, apply not only to this  
24 MRP, but also to the other 14 MRP's that are still pending?  
25 That definition?



1 A I guess I would have to refer to counsel as to what the  
2 retroactive implications of that definition are.

3 Q What is your understanding?

4 A I think I prefer to defer that question until I talk to  
5 counsel.

6 Q Well, I would prefer if you would tell me whether you as  
7 the director of DOGM have an understanding with respect to the  
8 application of that changed definition of adjacent area.

9 A We have not discussed that specific changed definition  
10 with regard to the Bear Canyon property. If you want an inter-  
11 pretation from me with regard to that, I would have to take the  
12 time to talk with the Assistant Attorney General and with tech-  
13 nical staff as to the implications. That has not been a topic  
14 of discussion with regard to our recent review of Bear Canyon.

15 Q Thank you very much, Doctor. Without leaving that area  
16 too prematurely, it states in the notice of deficiency: "Fail-  
17 ure to show the location and extent of known underground mines  
18 within the proposed mine plan and adjacent areas was not  
19 brought to light in the May 11, '84, Division memorandum."

20 Do you know why that technical oversight occurred?

21 A It's my understanding that the first time that the  
22 Division had in its possession what they considered to be a  
23 reasonable map of the permit area boundary was a result of an  
24 April 30, 1984, application or response to the Division from  
25 Co-op on Bear Canyon Mine. I don't know why the inconsistency



1 was not noted when we conducted the May 11--or, when the May  
2 11 review was first presented. It existed certainly at that  
3 time. I do not know why it was not recognized at that time.

4 Q You, of course, as the director would not expect any ap-  
5 plicant with an MRP in this State to respond to apparent incom-  
6 pleteness if they were not aware that the Division--that their  
7 application was incomplete, would you?

8 A I realize that to the extent that we present issues which  
9 --or, areas which we defined are deficient in a permit appli-  
10 cation from any applicant, that we expect that they will address  
11 those issues. However, we also expect that any information  
12 that an applicant supplies to the Division, in accordance with  
13 any aspect of the review, is going to be to the best of their  
14 knowledge complete and accurate.

15 Q They, however, do not have final oversight in the approval  
16 of their own application, do they?

17 A No, but they certainly have final review and responsibility  
18 to assure the accuracy of any information which they provide  
19 to the Division. Frequently it isn't until we can compare a  
20 variety of maps or until we can compare information and data  
21 that has been supplied in response to the determination of com-  
22 pleteness that we are able to detect inconsistencies or contra-  
23 dictions in that material, and there is no way that we can  
24 make those determinations until we have sufficient information  
25 to form a basis for that.





1        That does not preclude what we consider to be the responsi-  
2        bility of the applicant to supply accurate information to us  
3        and to assume primary accountability for the accuracy of any  
4        data or maps that they supply.

5        Q     With respect to this particular MRP, are you aware of any  
6        other MRP's that have been approved by DOGM where the MRP was  
7        incomplete?

8        A     The Division has made in all cases an evaluation and has  
9        made a determination as to whether there is completeness, and  
10       they are required by law to make that determination before pro-  
11       ceeding on with the technical analysis. The Division has made  
12       those determinations in the past. They have made in some cases  
13       which we have discussed earlier specific cases, determinations  
14       of incompleteness, and they have not proceeded to the stage of  
15       technical analysis, and administrative delay has been revoked.

16       Q     Have they ever granted a permanent permit when they have  
17       known or had reason to know that the application, the MRP, was  
18       incomplete?

19       A     It's difficult for me to--

20       Q     I'm not asking you--

21       A     --to provide an opinion on that.

22       Q     I'm not asking for an opinion.

23       A     All I can tell you is that the record indicates that in  
24       every case when a mine application--or, when an operator has  
25       been granted a permanent program permit that there is a



1 decision document in our files, in our possession, that indi-  
2 cates that a positive determination of completeness was made  
3 in accordance with our rules and regulations.

4 Q So in particular, you would not be aware of the MRP of  
5 Jenwal in Huntington Canyon which did not include any seeps and  
6 springs inventory as required by the regulations then extant;  
7 is that correct?

8 A I'm aware that we have an application with Jenwal and that  
9 there has been a determination. I'm not familiar with the  
10 specific document, and I would hesitate to comment on it from  
11 that point of view.

12 Q Are you aware that Jenwal has a permanent permit?

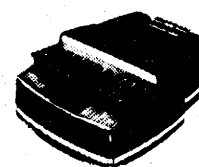
13 A Yes.

14 Q Are you aware that Jenwal did not conduct any core drilling  
15 in order to determine the hydrology in their mine area?

16 A I don't know what the basis for their application was.  
17 I have not reviewed it sufficiently to be able to make any  
18 statements concerning what information, technical or complete-  
19 ness in nature is part of that application.

20 Q Would it surprise you that the seeps and springs inventory  
21 of Jenwal was submitted after their permanent program was  
22 approved?

23 A Again, opinion. I don't know what the basis for granting  
24 that determination was. I don't know what the record indicates  
25 in materials of what is in their permit. And I don't feel I



1 have a basis for commenting on what the history of that permit  
2 is. It was--

3 Q All right. Let me get away from July 13 here for a minute.  
4 We've talked here today about your authority; and I think that  
5 you and counsel have adequately attempted to define what the  
6 authority is. As I understand it in a nutshell, it is your  
7 purpose to act under the regulatory authority granted you by  
8 the state in the best interests of the public and the environ-  
9 ment. Is that correct?

10 A That's correct.

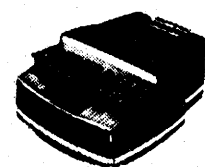
11 Q Is there any other aspect of your regulatory authority that  
12 needs to be given consideration in your review of MRP's?

13 A We have the responsibility to review those mine areas or  
14 mine reclamation plans in accordance with the Act, with the  
15 subchapter that's referred to, and with regard to the State  
16 regulatory program.

17 Q Let me be more specific, Dr. Nielson. It states in 40-10-  
18 1, which is the Act that you're referring to, paragraph 1--and  
19 I'm deleting the first portion of the sentence and picking up  
20 after the semicolon on the third line from the bottom of that  
21 paragraph.

22 "It is, therefore, essential to the national interest to  
23 insure the existence of an expanding and economically healthy  
24 underground coal mining industry."

25 Is that part of your responsibility?



insure  
↓

1 A I think certainly in any area of minerals development in  
2 the State of Utah, the Division has a responsibility to conduct  
3 its regulatory actions in a manner which provides for the wise  
4 development of natural resources, including underground coal  
5 mining.

6 Q Well, are you arbitrarily substituting your use of the  
7 term wise for the statutory language promulgated by the  
8 Legislature?

9 A No. I don't think so. I think we're saying the same  
10 thing. But this is only one part of what our charge is.

11 Q And the public good and the environment are two other  
12 charges; is that correct?

13 A Certainly.

14 Q And all of that has to be put into a scale by your  
15 Division; is that correct?

16 A Certainly.

17 Q And you take all of that into consideration when you make  
18 determinations of completeness and technical analysis and im-  
19 pose various requirements on applicants in order to get a per-  
20 manent permit, don't you?

21 A That's certainly an overriding consideration in everything  
22 we do, because that is part of our charter, yes.

23 Q Was there a discussion with respect to the economic costs  
24 of obtaining the information that your Division now seeks to  
25 obtain from Co-op as it relates to the July 13 DOC?



↓ base. One of them

1 A We did not--I did not and I am not aware that my staff--  
2 well, while I don't attempt to speak for them--in any way at-  
3 tempt to insert financial considerations in place of any of  
4 their responsibilities to conduct the review for determination  
5 of completeness.

6 Q In the review that we have gone over so far, was there any  
7 discussion with your staff about the necessity of Co-op conduc-  
8 ting a core drilling in order to determine hydrology in the area?

9 A We discussed the necessity of providing an information  
10 base, with a realization that there are a number of ways of  
11 achieving that information base. One of them would be drilling,  
12 core or otherwise.

13 Q Have you suggested that to Co-op?

14 A Have I suggested to Co-op--I'm sorry.

15 Q Well, let me say, have you or your staff suggested that  
16 to Co-op?

17 CHAIRMAN WILLIAMS: Suggested what?

18 Q (By Mr. Rothey) Suggested core drilling as a way of get-  
19 ting the data you're talking about.

20 A I think the statute specifically indicates that that may  
21 be one option of collecting that information, but I am not  
22 aware that there was ever a requirement made by my staff; and  
23 certainly in the reviews, here is an indication that that had  
24 to be the manner by which, and was the only method, by which  
25 information could be gathered or had to be gathered. I don't



1 believe there was a stipulation that said you had to drill core  
2 holes to gather that data.

3 Q In my review with you today of the testimony of Bruce  
4 Callister, would you be able to make a recommendation based  
5 upon his testimony that there would or would not be a require-  
6 ment for core drilling in order to gather additional data on  
7 this particular MRP?

8 A I don't think that's the question before us.

9 Q That's my question to you, Doctor.

10 A I don't believe that I have sufficient information at this  
11 point to tell you whether or not on the basis of Bruce Callister's  
12 testimony you should go out and conduct core drilling.

13 Q Does anyone in your staff have that information?

14 A I think my technical staff would give you an opinion on  
15 that. The determination at this point and questions that they  
16 have been asked to address is not whether or not Co-op Mining  
17 Company should conduct drilling on that property, but that they  
18 should provide sufficient information to form a basis for a  
19 determination of completeness and, hence, the next step of  
20 technical analysis.

21 I think the question you are asking is more appropriately  
22 a question of technical analysis in terms of what specific  
23 data you need to supply, what physical data. What we are saying  
24 right now is that there has to be a basis for making a deter-  
25 mination. There has to be sufficient information to even know



1 at this point whether conclusions that you would propose and  
2 the directions you would take to see your mine plan review  
3 would be sufficient. And we do not have that basic informa-  
4 tion.

5 Q You do have the seeps and springs inventory of the  
6 Division of Wildlife, don't you?

7 A I'd have to check with staff. I don't know--I am not  
8 familiar with that specific document.

9 Q Of course, we have already talked about Dr. Callister's  
10 testimony.

11 A Yes, sir.

12 Q You're aware of that? In 784,13(b)(4), can you tell me  
13 in your review of this DOC with the staff how you concluded  
14 that 8100 cubic yards of suitable topsoil material were needed  
15 for reclamation?

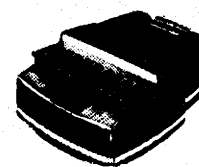
16 A I'd have to refer that to the staff.

17 Q Is that a technical issue?

18 A It is an issue that the Division staff, rather than my-  
19 self, has prepared and reviewed, and they are much more an  
20 appropriate source of information with regard to that question.

21 Q In reviewing it, did you discuss with them the presumption,  
22 the bold assertion by Co-op, that they in fact had in excess  
23 of 6500 cubic yards of soil available for the reclamation of  
24 this particular mine site report?

25 A I am aware that there is available topsoil. Again, I



784.13(b)(4)

1 don't feel that I am an appropriate witness to testify speci-  
2 fically to this issue, and I would prefer to refer it to the  
3 staff who work directly on this review.

4 Q If the staff told you that Co-op's application, their MRP,  
5 suggested that they had 6500 cubic yards of suitable soil avail-  
6 able for reclamation, and your staff told you that they needed  
7 8100, would you as the director consider that a technical de-  
8 termination or a completeness determination?

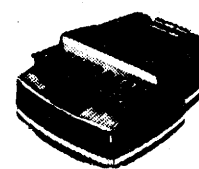
9 A The technical determination on that issue would become one  
10 of whether the topsoil that you had available to you was suit-  
11 able, could be used, ~~met~~ the qualifications, the requirements,  
12 for the use to which it was designed.

13 The determination of completeness, which is the question  
14 that we're addressing at this point, would be whether the in-  
15 formation that you had that amount of soil available and any  
16 additional information you provided was sufficient in terms of  
17 completeness of information provided for the staff to move to  
18 the next point of saying that that soil was suitable.

19 Q Are you aware that in this MRP the Campbell property in  
20 Elmo, Carbon County, was identified as the source of addition-  
21 al topsoil for reclamation that would be required?

22 A I'm aware that there was a source identified. I don't  
23 recollect that that was the source.

24 Q Are you aware that the soil analysis of that soil was sub-  
25 mitted on June 28 which you have characterized as something





1 you were mandated to review as part of this--

2 A I don't know the dates that it was submitted. I'm afraid  
3 I can't testify to that.

4 Q Are you aware that that soil analysis was submitted?

5 A I don't know that it was, no. I'm sorry. That was--I  
6 think, again, one of the other witnesses would be an appropriate  
7 witness to address that question to.

8 Q 784.20, Dr. Nielson, refers to Subsidence Control Plan.  
9 Without going over the testimony of Bruce Callister again, I  
10 ask you if you are aware that his opinion with respect to sub-  
11 sidence as it relates to this mining operation and how it may  
12 impact upon groundwater was included in Appendix 7A to the MRP?

13 A That was part of his testimony in the 1980 hearing?

14 Q Yes.

15 A Yes. I'm aware of that.

16 Q On the third page of the July 13 DOC your staff has in-  
17 cluded an addendum. Did you discuss that with the staff prior  
18 to sending this letter?

19 A Yes, I did.

20 Q And that, is it fair to say, is the first impression that  
21 has been submitted to Co-op as a result of your completeness  
22 review? It's the first time that you have noted that to Co-op?

23 A I think that--yes, and I think that states that it is the  
24 first time that it was formally prepared in a written corres-  
25 pondence with Co-op and that it was based on specific informa-



784.20  
↓  
Subsidence Control Plan

1 tion that has come in to us.

2 Q That refers to 771.23, which requires that the applicant  
3 provide the names of persons or organizations which collected  
4 and analyzed data. Have you in your review with the staff of  
5 this MRP determined that the names of Wendell Owen and Mel  
6 Coonrod have been included in the MRP?

7 A Yes, I'm aware that those names appear in the MRP.

8 Q Referring to subparagraph (d) of that same section: "The  
9 application shall state the name, address, and position of  
10 officials of each private or academic research organization  
11 or governmental agency."

12 Are you aware that the name, address and position of Bruce  
13 Callister and Larry Dalton with the Division of Wildlife have  
14 been submitted both with respect to their name, their address,  
15 and their position in this MRP?

16 A Yes. I'm aware that their names are much mentioned in the  
17 MRP.

18 Q Are you aware of any other persons who collected data for  
19 this MRP whose names do not appear in the MRP?

20 A No, I'm not aware that there is anyone else.

21 Q So that wouldn't be part of the issue of completeness,  
22 then, would it?

23 A The concern addressed here is that there is data pre-  
24 sented within the mining reclamation plan that is not speci-  
25 fically related to one of those individuals as to where the



*Those*

erase "how it is" ↓ base of

(individuals, (and)

↓ Q

1 data has been derived from, and the question specifically  
2 addressed is to who the specific author's informa-  
3 tion within the MRP.

4 Q But does 771.23 require that you correlate the information  
5 to the name of the individual, or merely that you identify the  
6 individuals in the bibliography as to who contributed--

7 A It requires that the individuals who contributed are indi-  
8 cated within the MRP. However, there are still specific pieces  
9 of information that have been provided within the MRP or within  
10 additional responses that Co-op specifically has provided to  
11 that MRP where the Division has questioned because of the tech-  
12 nical nature of that information, because of the nature of the  
13 information, and the fact that there were a number of individuals  
14 indicated within the MRP who may have provided that information,  
15 we are concerned about the information and which one of those  
16 individuals, if one of those individuals, was the source of  
17 that information.

18 Q And you determined with the staff that that was a question  
19 of completeness, rather than technical--

20 A We determined with the staff that that was a question that  
21 we would raise in the addendum to the July 13 letter, because  
22 we had some uncertainties as to who had authored some of that  
23 information or prepared some of that information. It was written  
24 as an addendum to that preparation.

25 Q Dr. Nielson, referring to Exhibit J hanging on my right--



1 may I stand up?

2 CHAIRMAN WILLIAMS: Certainly.

3 Q (By Mr. Rothey) We may have to refer this to the staff  
4 also. Do your records reflect on December 11 that you sent to  
5 Co-op Mine a notice that you could not complete the review  
6 within the eight months mandated by law and you were invoking  
7 administrative delay?

8 A It's my understanding that there was--and I'm afraid I have  
9 to speak from that point, because I was not within the Division  
10 at that point--it's my understanding that there was a notice  
11 that went out to the operators, the date I have is December 11,  
12 1981.

13 Q That would be immediately after this date, December 10;  
14 is that correct?

15 A That's correct.

16 Q So on December 11, if your records prove to be true, you  
17 in fact were sending out a notice to Co-op that you could not  
18 complete the review and that you needed additional time?

19 A That is correct, that it could not be completed within the  
20 eight months originally mandated.

21 Q Now, this again is a technical question, and I know that  
22 you haven't made the computation. So I'm going to suggest it  
23 to you. Would it surprise you that the review period from  
24 March 21, 1981, until today has allowed or afforded the Division  
25 27 months time to review this MRP and has afforded Co-op 11



1 months to comply?

2 A I haven't made the calculation, but I'm assuming that  
3 your numbers are correct.

4 Q All right. Counsel has offered and the Board has accepted  
5 Exhibit B. Do you have that original there in front of you?

6 A Yes, I do.

7 Q We've already talked at some length about the fact that  
8 on or about November 8 of 1983, some eight months ago, that a  
9 compliance schedule was sent out by DOGM to all pending appli-  
10 cants, or all applicants who had an MRP pending; is that  
11 correct?

12 A That's correct.

13 Q Is it fair to say that the completion dates of those 15  
14 applications were approximately the same as that set forth in  
15 the Co-op Mine completion schedule?

16 A Actually, Co-op's was longer than most.

17 Q Co-op's was longer?

18 A The final decision date for the final decision is actually  
19 a variety of months extended beyond some of the others.

20 Q So are we to take it from that that you have completed and  
21 finally approved the other 14?

22 A They are--the other 14 are in part the review responsibility  
23 of the Division of Oil, Gas, and Mining and part the review  
24 responsibility of the Western Tech Center of the Office of  
25 Surface Mining. There have been recommendations made on some



1 of those 15 that they be granted permanent program permits.  
2 There have been permanent program permits issued on some of those  
3 15, and some of the 15 are still in the stage of review at the  
4 technical analysis.

5 Q As I review Exhibit B, it was the proposal of DOGM that  
6 the final approval of the MRP of Co-op Mining would be granted  
7 on or about July 27, tomorrow, 1984, if they submitted all of  
8 the data necessary for you to complete a review? Is that a  
9 fair reading of that schedule?

10 A That's correct.

11 Q You said that Co-op was given more time than everybody  
12 else?

13 A No. That isn't what you asked me. You asked me if the  
14 final decision dates were the same for all other entities, and  
15 I said, no. I said the final decision date, 7-27-84, was in  
16 many cases a number of months beyond final decision date for  
17 other entities. Those decision dates ranged everywhere from  
18 March of '84 through the state.

19 Q But no final decision has been rendered by DOGM; is that  
20 correct?

21 A No final decision has been rendered on Co-op. DOGM has  
22 reviewed and has proceeded on schedule--

23 Q Well, I understand that you testified to this Board today  
24 that of the 20 applicants, only 5 of them have been approved,  
25 and there are 15 that are pending?



1 A There are 15 that are in one state or another in terms of  
2 issuance of final approval, approval for technical analysis.

3 Q Those 15 indeed had a completion date for final approval  
4 earlier than July 27, according to the November 8 schedule?

5 A Yes.

6 Q With a couple of exceptions they were earlier than the  
7 27th.

8 MR. ROTHEY: I have no other questions of this  
9 witness.

10 CHAIRMAN WILLIAMS: Any further questions, Ms.  
11 Roberts, of this witness?

12 MS. ROBERTS: Yes, I do have a few.

13 REDIRECT EXAMINATION BY MS. ROBERTS

14 Q Dr. Nielson, during the period since the State has gained  
15 primacy in 1981, have other operators obtained their permanent  
16 program permits even in light of any kind of personnel changes  
17 that have occurred?

18 A That's correct.

19 Q Another matter with regard to the 1980 hearing in which  
20 Mr. Callister testified, with regard to an approval of a notice  
21 of intent for Co-op Mine, is it your understanding that the  
22 regulations and statutory provisions had changed since the 1980  
23 hearing with regard to the groundwater situation?

24 A That is true.

25 Q Is it your understanding that the regulations that have



1 been promulgated are in fact much more stringent and in depth  
2 than those that were the subject of the 1980 hearing?

3 A That's true.

4 Q Is it sufficient to say that Mr. Callister's testimony that  
5 was presented at the hearing in 1980 may have been sufficient  
6 for the Chapter 8 permit?

7 A It may have been. I don't think that there was an attempt  
8 to make that determination. I wouldn't attempt to, you know,  
9 second-guess it at this point, but it's conceivable that it  
10 would have been acceptable at that point.

11 Q Is it your understanding that Mr. Callister's testimony  
12 would not be sufficient to render an even cursory completeness?

13 A It has been the determination of the Division that the  
14 information provided in the mine reclamation plan, which in-  
15 cludes Mr. Callister's testimony, is not sufficient for a de-  
16 termination of completeness, as required in their regulations  
17 at this time.

18 Q Mr. Rothery did point out in the statute that there is a  
19 statement of an economically healthy underground coal mining  
20 industry; and I would like to indicate that that is one of the  
21 findings of the Utah Legislature. Looking at the next section  
22 in this chapter, 40-10-2, which is the listing of the purposes  
23 of the chapter, are you aware of the section defining in part  
24 the duties of the Division and the Board or any other statutory  
25 provision or regulation that requires you to waive any specific





1 statute for economic reasons?

2 A No.

3 Q Would you explain why Co-op's final decision deadline  
4 was extended from January, the original January deadline until  
5 March, and especially in comparison to the other deadlines from  
6 the other mine operations?

7 A It was extended because it became obvious to us as we  
8 approached the deadline that there was no way it was going to  
9 be possible to make that determination in January of '84. We  
10 instituted a revised schedule to allow the operator additional  
11 time to provide information which would be sufficient for us  
12 to render a determination of completeness. Also, we felt it  
13 necessary to provide a schedule which would enable us to out-  
14 line to the company what we anticipated to be the deadlines  
15 as we proceeded throughout the review, so that they knew what  
16 sort of a timetable we were attempting to follow in terms of  
17 their review.

18 The deadline was extended a second time from that  
19 November 8 review at a point when the Division made a March 27,  
20 1984, determination that the response was still deficient. We  
21 met on April 2, and it was on the basis of that April 2 meeting  
22 that we allowed Co-op Mining an additional 28 days, until the  
23 30th of April, to supply additional information to enable us  
24 to make a determination of completeness with regard to that  
25 application.



1 Q Dr, Nielson, would you speak to the situation involved in  
2 the March 30 DOC/TD regarding the asterisks and the situation  
3 that was involved in placing those asterisks in that DOC?

4 A Actually, Co-op Mining went through two stages of appli-  
5 cation of MRP's to us. The initial application was received  
6 March 23, 1981, but there was also an October '83 submittal,  
7 which so significantly changed that application that it effec-  
8 tively became a new MRP application to the Division. The  
9 asterisks are specifically addressing comments related to that  
10 second stage application or response.

11 MS. ROBERTS: Thank you. I have no further questions.

12 CHAIRMAN WILLIAMS: Mr. Rothey, anything further?

13 MR. ROTHEY: If I may, Mr. Chairman.

14 RE CROSS-EXAMINATION BY MR. ROTHEY

15 Q Dr. Nielson, on redirect examination counsel has asked you  
16 a question as to whether you as the Director of the Division  
17 of Oil, Gas, and Mining are aware of any provisions in the  
18 statute that would allow you to overlook the statute in favor  
19 of economic considerations; and you said that there are none  
20 that you're aware of. Is that correct?

21 A I'm aware that there are none that require us--or provides  
22 for us to overlook or not to implement part of the statute be-  
23 cause of economic considerations.

24 Q You are aware that this is a room and pillar mining op-  
25 eration?



172  
#2

1 A Yes.

2 Q Are you then aware of the statute in 40-10-18(2)(a) of the  
3 part that says as follows:

4 "That you shall adopt measures consistent with known tech-  
5 nology in order to prevent subsidence, causing material damage  
6 to the extent technologically and economically feasible, maxi-  
7 mize mine stability and maintain the value and the reasonably  
8 foreseeable use of the surface lands, except in those instances  
9 where the mining technology used requires planned subsidence  
10 in a predictable and controlled manner, but nothing in this  
11 subsection shall be construed to prohibit the standard method  
12 of room and pillar mining."

13 You are aware of that?

14 A Yes.

15 Q Would the standard method of room and pillar mining, as  
16 it relates to subsidence, as referred to in your DOC of July  
17 13, require economic considerations to be given to the ques-  
18 tion of whether or not this application is complete in that  
19 issue?

20 A The specific responsibility that addresses is that we pre-  
21 vent subsidence to the extent that it's technologically and  
22 economically feasible and that we do it in a manner which  
23 doesn't prohibit the use of the standard methods.

24 That isn't to say that if there are two methods of going  
25 at that that provide protection, that the company might not opt

1 for one manner as opposed to another, or that the conditions  
2 might not change within the mine, hence, requiring one manner  
3 or method of mining in one area of the mine as opposed to an-  
4 other. But it does indicate that the primary responsibility  
5 is to prevent subsidence.

6 Q The primary responsibility? Is it fair to say--

7 A It says: "In order to prevent subsidence." That to me  
8 says that your direction is to prevent subsidence, and you  
9 shall do that within these constraints.

10 Q But only to the extent that it doesn't interfere with the  
11 standard operations of room and pillar mining?

12 A No, it doesn't interfere. It says that it shall not be  
13 construed to prohibit--

14 Q Standard--

15 A --standard forms of mining. And it says that you shall  
16 weigh technological and economic feasibility.

17 Q You could in fact, as it relates to this MRP, approve it  
18 in part and disapprove it in part; is that correct?

19 A I'm sorry. I don't understand specifically what you're  
20 asking.

21 Q Utah Code Annotated, Section 40-10-14(1) and (2) suggest  
22 clearly that you can approve or disapprove in whole or in part.  
23 Have you considered that approach in this MRP of Co-op?

24 A With the determination--I don't think the citation is here,  
25 but with the determination of the completeness issue that we're



1 discussing today, I don't see that that is an option, because  
2 it is necessary before we can even make a determination as to  
3 whether information is sufficient technically or to move on to  
4 that technical analysis it is necessary that we have that infor-  
5 mation available to us in the mine reclamation plan.

6 MR. ROTHEY: Excuse me one moment, Mr. Chairman.

7 (Pause.)

8 Q (By Mr. Rothey) Without going into all the technical de-  
9 ficiencies set forth in the March 30 DOC and TD, I had pre-  
10 viously discussed with you the issue of topsoil, and I note on  
11 page 13 of that document under the title, "Technical Deficien-  
12 cies," a topic that treats the question of topsoil removal and  
13 replacement. Is it fair to say on the basis of that document  
14 that the question of topsoil removal and replacement was then  
15 considered to be technically deficient?

16 A Now, the point is that with regard to that--with regard  
17 to the issue of topsoil, there are completeness issues, and  
18 there are technical issues; and this citation as described on  
19 pages 13 and 14 is viewed by the staff as a technical deficiency,  
20 which needs to be addressed relative to the technical analysis.

21 Q Do you agree with that?

22 A Yes.

23 Q You will note that that does not have an asterisk by it.

24 A That is true.

25 MR. ROTHEY: No other question.



1 MS. ROBERTS: I have one.

2 CHAIRMAN WILLIAMS: All right.

3 FURTHER REDIRECT EXAMINATION BY MS. ROBERTS

4 Q With regard to the topsoil situation, you answered the  
5 question that there may be the completeness issues, and there  
6 may be technical issues. Is it possible that there may be  
7 completeness and technical deficiencies within the same section?

8 A Certainly.

9 Q And that the indication that a section may appear under  
10 the technical deficiency listing does not preclude it from  
11 also being incomplete in another matter?

12 A That is true.

13 MS. ROBERTS: Thank you. No further questions.

14 MR. ROTHEY: None. Thank you.

15 CHAIRMAN WILLIAMS: We're going to take a ten-minute  
16 break, and then we'll start with the next witness.

17 (Recess from 2:39 p.m. until 2:56 p.m.)

18 CHAIRMAN WILLIAMS: Let's resume. Do the members of  
19 the Board have any questions for Dr. Nielson at this time?  
20 Would you go ahead, please?

21 MS. ROBERTS: I'd like to call Ev Hooper from the  
22 Division.

23 PHILLIP EVERETT HOOPER

24 called as a witness on behalf of the Division, having  
25 been duly sworn, testified as follows:



work requirements  
for

DIRECT EXAMINATION BY MS. ROBERTS

Q Mr. Hooper, will you state your full name, business address, and place of employment, please?

A My name is Phillip Everett Hooper. I work at 4241 State Office Building, Salt Lake City, Utah, for the Division of Oil, Gas, and Mining.

Q What is your capacity with the Division?

A My title is reclamation soils specialist.

Q Would you give a summary of your education and experience?

A I have a bachelor of science degree in botany from Weber State College. I have completed the course work ~~requirements~~ for an MS from Utah State, and I am presently working on my master's thesis in soil science. I have been employed with the Division it will be three years next month as a reclamation soils specialist.

MS. ROBERTS: Thank you. Will the Board accept Mr. Hooper as an expert?

CHAIRMAN WILLIAMS: Any objection?

MR. ROTHEY: No objection.

CHAIRMAN WILLIAMS: Yes.

Q (By Ms. Roberts) Mr. Hooper, are you familiar with Co-op's MRP? Have you reviewed Co-op's MRP?

A Yes, I have.

Q I assume that that is in relation to the soils segments of the MRP?



1 A Yes.

2 Q Specifically, are you familiar with the general require-  
3 ments for a reclamation plan?

4 A Yes, I am.

5 Q What is that section in the rule book?

6 A It's 784-14(b)(4).

7 Q That is the specific statute, regulation, that has been  
8 found incomplete?

9 A Yes, it is.

10 Q That is on page 83. Would you read for the record the  
11 pertinent portion that has been determined incomplete?

12 A "A plan for removal, storage, and redistribution of top-  
13 soil, subsoil, or other material to meet the requirements of  
14 UMC 718.21--" Excuse me. Not 718. 817.21 to 817.25.

15 Q Now, that is subsection (b), which begins, "Each plan  
16 shall contain the following information for the proposed per-  
17 mit area." Does Co-op have such a plan that would meet the  
18 requirements of 817.21 to 817.25?

19 A No, they do not.

20 Q What has been submitted on that?

21 A They have--well, this mine is a previously--it was pre-  
22 viously in operation and, consequently, there was no--most of  
23 the majority of the soil is not available for removal, to begin  
24 with. So they have submitted a plan that has proposed several  
25 alternative sources for a topsoil substitute, and they have





1 removed approximately 2600 cubic yards of soil material from  
2 the area of the scale house during its construction, and it is  
3 presently stockpiled at this time.

4 Q How much soil will be needed to reclaim this area?

5 A The area of disturbance to my understanding is a total of  
6 10 acres, and the minimum of six inches of soil over the entire  
7 area would require 8100 cubic yards.

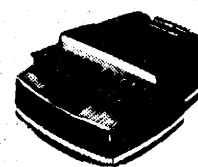
8 Q How did you arrive at this six inches of soil?

9 A There are 1616 cubic yards of soil per acre foot.  
10 Consequently, that's 1616 cubic yards for the ten acres. And  
11 if you only have a half of an acre foot replacement, that is  
12 approximately 8100 cubic yards.

13 Q As opposed to 10 inches or 6 inches, is there some source  
14 that you looked at to determine how deep or how thick the soil  
15 needed to be spread?

16 A Just the professional minimum, my professional judgment  
17 for the minimum requirements to reclaim that area, the minimum  
18 depth of soil that would be needed. They have a soil survey  
19 initially of the area that has classified two types of soil,  
20 two mollisols. And the initial A horizon which the law requires  
21 removal, if this would have been a new mine, in one area is a  
22 minimum of 10 inches and in the other soil series is 16 inches.  
23 So the native soil is much deeper than the six inches that we  
24 were requiring to be replaced.

25 Q Has Co-op committed to replacing this to the depth of 6



1 inches?

2 A Yes, they have.

3 Q How have they committed? Have they committed to that in  
4 the MRP?

5 A Yes, in responses to our deficiency documents, their MRP.

6 Q With regards to the most recent submittal, is the material  
7 submitted by Co-op sufficient for you to make a determination  
8 of the soil substitute that would be required to make up the  
9 difference between what they have available and what they need  
10 is the best available to support the vegetation for reclamation?

11 A Are you speaking of the June 25 or June 28 submittal?

12 Q That's correct.

13 A No, there is not enough information available in that sub-  
14 mittal to determine if that is the best suitable material for  
15 reclamation.

16 CHAIRMAN WILLIAMS: Are you talking about material  
17 above and beyond the 2600 feet?

18 THE WITNESS: Yes. They have submitted data on the  
19 initial 2600 cubic yards that they have stockpiled now. It is  
20 the remainder of the 8100 that they do not have any chemical  
21 or physical analysis available to make a decision.

22 Q (By Ms. Roberts) Have they ever submitted chemical an-  
23 alyses on any source for soil substitute?

24 A No.

25 Q On any source?



0018  
↓  
↓  
or

(91) 1 A On any source.

2 MR. GARR: How difficult is that chemical analysis  
3 to obtain, Mr. Hooper?

4 THE WITNESS: It is relatively easy to go out and  
5 sample the area and submit it to a chemical laboratory.  
6 There's several in Salt Lake. Utah State University has a lab  
7 capable of doing it, BYU has a lab capable of doing it, and  
8 there are several in Colorado that are capable of doing it.

9 MR. GARR: In your opinion, is that an expensive  
10 process? Would that be asking them to do quite a bit in terms  
11 of cost outlay?

12 THE WITNESS: If it's relative to the mining opera-  
13 tion, no. It would not be real expensive to do.

14 MR. GARR: Thank you.

15 Q (By Ms. Roberts) Mr. Hooper, let me ask you another  
16 question on the soil analysis. Maybe I'm just not understand-  
17 ing the answer. Has there been a time in the past that they  
18 have submitted a source for the soil substitute to make up this  
19 difference, and that it was accepted by the Division as a  
20 soil substitute and later the source was changed?

21 A Yes. It was--they have submitted a source, but it was never  
22 per se accepted. They had committed--well, in their MRP re-  
23 sponse, they had submitted--they were going to use the soil  
24 from the Campbell property and committed--well, they had taken  
25 samples and indicated that they had been sent to a lab and as



1 soon as the data was available it would be sent to the  
2 Division.

3 Q Has the Division received any information on that?

4 A No, not on the Campbell property.

5 MR. ROTHEY: The Board will recall, if I may inter-  
6 rupt, that we were instructed not to make any further submit-  
7 tals. That information has come back to us, Mr. Chairman.

8 Q (By Ms. Roberts) As of the June 25 submittal, however,  
9 this section remains incomplete due to the lack of chemical  
10 analyses?

11 A Yes, it does.

12 Q Have you in the past discussed possible solutions to the  
13 problem of finding a soil substitute for this particular area?

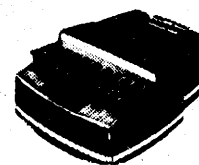
14 A Yes, I have.

15 Q And you suggested solutions to them?

16 A Yes. I initially suggested the Campbell property, plus  
17 there is soil material available on site that could be used  
18 as a source; but it still needs to have the chemical and  
19 physical analysis conducted and submitted as part of the mine  
20 plan.

21 Q What is the effect of being unable to make your determi-  
22 nation? In other words, what is the effect of not having this  
23 particular section complete?

24 A It makes it difficult for the Division to determine what  
25 type of soil they are going to use for reclamation, and this



1 plays a direct factor on revegetation, being certain plant  
2 species require different soils or do better, say, in a sandy  
3 soil or a heavy clay soil.

4 Without this information, a correct seed list per se could  
5 not be evaluated. And it also affects the fact of bonding,  
6 because if the soil--the source of the substitute material is  
7 offsite, it would require a higher bond to account for the  
8 cost of transportation of the soil material to the site, where-  
9 as if it was on site, the bond could be lowered just for the  
10 moving around upon the site.

11 MS. ROBERTS: I have no further questions at this  
12 time.

13 CHAIRMAN WILLIAMS: Mr. Rothey.

14 CROSS-EXAMINATION BY MR. ROTHEY

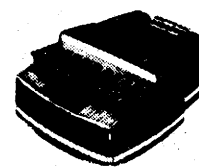
15 Q Mr. Hooper, in preparing your testimony today, did you re-  
16 view Appendix 6 X, Topsoil Sampling, as submitted in the MRP  
17 of October 1983? Oh, excuse me. That would be the addendum  
18 that was submitted in June?

19 A On June 28?

20 Q Yes.

21 A Yes, I have.

22 Q In the review of that, you were able to determine that  
23 both the scope, the methodology, the definition of existing  
24 topsoil stockpiles, the loadout alternatives, the road fill,  
25 the results and conclusions were set forth in the application,



1 in the MRP, with that addendum; is that correct?

2 A Could you repeat that again? Go through it?

3 Q Well, referring specifically to Appendix 6 X and the  
4 chapter headings, or the paragraph headings therein, you were  
5 able to determine as it related to the topsoil sampling that  
6 at least those areas had been addressed. Is that correct?

7 A Yes. That is correct.

8 Q You were able to determine that the soil analysis for the  
9 topsoil that is stockpiled dated, I believe, June of 1979, was  
10 also included in the chapter under Soils; is that correct?

11 A For the--for the soil that is stockpiled presently?

12 Q Yes. The soil analysis for the soil that is stockpiled.

13 A It wasn't June, because the soil was not removed until the  
14 scale house was completed, and that was sometime in '81, if I  
15 recollect right. '81 or '82 is when it was completed.

16 Q Drawing your attention to Chapter 6 on Geology, there is  
17 an Appendix 6 C, a soil analysis done by Commercial Testing and  
18 Engineering Company, Chicago, Illinois, dated June 25, 1979.

19 Are you aware of that?

20 A I would have to look at it to see--

21 Q All right.

22 A --which one you have reference to in particular.

23 Q You suggested to Co-op the Campbell property?

24 A Yes, I did.

25 Q Is that your testimony?



1 A Yes.

2 Q Any particular reason why you suggested Campbell?

3 A No, no particular reason. Just as an available source of  
4 soil material.

5 Q Were you familiar with the soil there?

6 A I'm familiar with C. V. Spur, which to my understanding  
7 is close to the Campbell property.

8 Q Is the soil there comparable to a type of soil you would  
9 expect to utilize in recalamation here of this mine?

10 A It's heavier soil and may have a salt problem. There are  
11 several soil series at the C. V. Spur site that I'm aware of.  
12 I'm not per se acquainted with the Campbell property. But the  
13 soil series at the C. V. Spur are heavy and in some cases have  
14 a definite salt problem.

15 Q You would be concerned about that technical aspect of the  
16 soil, whether the salinity of it would promote the types of  
17 seed that they are proposing to reseed this disturbed area?

18 A Yes.

19 Q But otherwise, you knew in review of the MRP that they have  
20 submitted that they were proposing to get at least 4,000 cubic  
21 yards from the Campbell property?

22 A Yes, I was.

23 Q Is it still your position today that they are proposing  
24 to get the soil from the Campbell property and their statement  
25 to you that the soil analysis was being done and would be



1 submitted as soon as it was realized that that is still a com-  
2 pleteness issue, as opposed to a technical issue?

3 A At the time I talked to Mr. Coonrod on the phone, it was  
4 after this submittal, he said that indeed that they had sent  
5 some soil samples to, I believe it was Utah State University;  
6 and he had gotten back soil fertility analyses, which in this  
7 case does not really address the suitability of the soil as a  
8 plant growth medium.

9 Q Mr. Hooper, I'm not talking about the suitability now.  
10 I'm talking about completeness. You have contended here to  
11 this Board that based on your calculations there is 10 acres  
12 of disturbed area, all of which must be reclaimed at a minimum  
13 depth of six inches and that based on your calculations they  
14 will need at least 8100 cubic yards to do that.

15 A Yes, that's correct.

16 Q And in their submittal under topsoils, Chapter 8.6 on  
17 page 16A--excuse me--on page 16, dated 4-26-84, it says:  
18 "At present, the mine is deficient approximately 2400 cubic  
19 yards." Do you take issue with that?

20 A Yes. I do. And I brought it up in one of the later--my  
21 responses to their MRP.

22 Q All right. And this is dated April 26, 1984.

23 A Yes.

24 Q So you brought it up after April 26, 1984?

25 A Yes. It's in one of the--it would be in the April 30 or





1 the--one of our--I'm not sure which one.

2 Q May 13?

3 A May 30.

4 Q The question is, they have asserted that they need an  
5 additional 2400 yards.

6 A Yes.

7 Q You feel as a soil expert that they need 8100?

8 A I feel that there is 8100 total needed to reclaim the area.

9 Q All right. Is that a technical issue?

10 A The volume--yes, it would be, to argue the two numbers,  
11 the volume would be a technical issue.

12 Q They did suggest that even though they contended that they  
13 only needed an additional 2400 with the 2600 that was on site  
14 that they had purchased in excess of 4000 cubic yards from the  
15 R. D. Campbell property?

16 A Yes.

17 Q You were aware of that?

18 A Yes.

19 Q So the fact is that Co-op as it relates to your area of  
20 expertise in DOGM has suggested that they do have soil analysis  
21 for the topsoil that is stockpiled, that they are getting soil  
22 analyses for the 4000 plus cubic yards that have been purchased  
23 by them from the Campbell property and that they would submit  
24 that?

25 A Yes.

Q In light of that, do you still feel that that is a



1 completeness issue?

2 A Yes, I do, because I have no data to base any findings on,  
3 chemical or physical analysis, for me to evaluate the Campbell  
4 property or any other substitute material that Co-op has avail-  
5 able. I have no data to make an evaluation on.

6 Q As to whether or not it is satisfactory?

7 A Yes, whether it is suitable material.

8 Q If they give you the soil analysis, is that going to satis-  
9 fy both completeness and the technical issue?

10 A No, it may not. It depends on the quality of soil they  
11 are proposing.

12 Q So your distinction then is that the soil analysis may be  
13 defective and, therefore, the MRP still incomplete?

14 A No, not that the soil anlysis may be defective. It may  
15 be that the soil they propose is a poorer quality than should  
16 be used on that site.

17 Q And that would render the MRP incomplete?

18 A It would be--it would be a technical question at that  
19 time because of the data supplied.

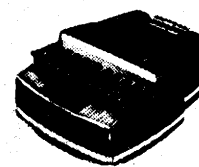
20 Q How did you compute the area of 10 acres?

21 A It is from the MRP.

22 Q Do you know where?

23 A Not right offhand.

24 CHAIRMAN WILLIAMS: Can you identify the area to be  
25 reclaimed?



1 THE WITNESS: Not from any map here. There is no  
2 surface disturbance map there.

3 Q (By Mr. Rothey) Do you know if some portion of the area  
4 has already been reclaimed, Mr. Hooper?

5 A Yes, it's been reclaimed under what is termed interim  
6 reclamation, which is to the best of my knowledge, interim  
7 means in the interim between disturbance and final reclamation,  
8 and it is not permanent reclamation.

9 Q Have you in making your computation for the total reclama-  
10 tion of acreage designated to the depth of six inches given any  
11 consideration or credit for that portion that has already been  
12 reclaimed interrimly?

13 A No, I have not.

14 Q Do you know how large that area would be?

15 a No, I do not.

16 MR. ROTHEY: No further questions at this time.

17 CHAIRMAN WILLIAMS: Ms. Roberts.

18 REDIRECT EXAMINATION BY MS. ROBERTS

19 Q Do you have any analysis on anything except the 2600 cubic  
20 feet of topsoil that has been stockpiled? And that's with re-  
21 gard to the 2400 and the numbers that they were throwing out,  
22 the 4000 cubic feet, or that purchased in that going to come  
23 in? In other words, they have 2600 cubic feet stockpiled on  
24 their property now. Do you have an analysis on anything other  
25 than that?



1 A There is no other analysis on the proposed substitute  
2 material in the MRP.

3 Q So although Co-op has agreed in the MRP to the 6 inches  
4 of topsoil needed to reclaim the site, they have not produced  
5 any analysis on the remaining topsoil that would be required?

6 A No, they have not.

7 Q So you would consider that that deficiency would render  
8 784-13(b)(4) incomplete?

9 A Yes, I would.

10 MS. ROBERTS: Thank you.

11 CHAIRMAN WILLIAMS: Mr. Rothey?

12 MR. ROTHEY: No further question.

13 CHAIRMAN WILLIAMS: Does the Board have any further  
14 questions of Mr. Hooper at this time?

15 Next witness.

16 MS. ROBERTS: I'd like to call Rick Smith from the  
17 Division.

18 RICHARD V. SMITH

19 called as a witness on behalf of the Division,  
20 having been duly sworn, testified as follows:

21 DIRECT EXAMINATION BY MS. ROBERTS

22 Q Mr. Smith, would you state your name, business address,  
23 and employment for the record?

24 A Richard V. Smith, 4241 State Office Building, Salt Lake  
25 City. Division of Oil, Gas and Mining.



1 Q And you are employed as --

2 A A geologist.

3 Q Thank you. Would you give a summary of your education and  
4 experience for the record?

5 A I received a bachelor's degree in geology from the Univer-  
6 sity of Minnesota, a master's degree in geology from the Univer-  
7 sity of Delaware. I worked for two years as a research asso-  
8 ciate to the Delaware Geological Survey. I worked for two  
9 years as a senior geologist for the North Carolina Geological  
10 Survey. In both of these positions, I dealt with subsurface  
11 geology, and a significant portion of my time was committed to  
12 groundwater geology. And I am presently employed as a geologist  
13 for the Division.

14 MS. ROBERTS: Will the Board accept Mr. Smith as an  
15 expert?

16 CHAIRMAN WILLIAMS: Any objection, Mr. Rothey?

17 MR. ROTHEY: No objection.

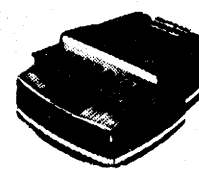
18 CHAIRMAN WILLIAMS: Yes, we will.

19 Q (By Ms. Roberts) Have you reviewed Co-op's mine plan?

20 A Yes.

21 Q Specifically, are you familiar with the sections that  
22 would pertain to the groundwater analysis; that is, Section  
23 783.15, the section dealing with maps and plans, which are  
24 783.24 and 25, and the subsidence control section, 784.20?

25 A Yes.



minimum, Part (1)

according to "the table,"

1 Q Beginning with 783.15, would you read or summarize the  
2 pertinent portions of the section which you have determined to  
3 be incomplete?

4 A Okay. On page 73 of the regulations, 783.15, Ground Water  
5 Information, Part A:

6 "The application shall contain a description of the  
7 groundwater hydrology for the proposed mine plan and adjacent  
8 area, including at a minimum, Part I. The depth below the sur-  
9 face and horizontal extent of the water tables and aquifers.  
10 The lithology and thickness of the aquifers. The quality of  
11 subsurface water if encountered. The application shall contain  
12 additional information which describes the recharge, the storage,  
13 and discharge characteristics of aquifers, and the quality and  
14 quantity of groundwater according to the parameters and in the  
15 detail required by the Division."

16 Q Would you explain what has been supplied by Co-op Mining?

17 A Yes. Section 3 of Part (a), 783.15, "The uses of water in  
18 the aquifers and water table," has been supplied by Co-op.

19 Q Are you familiar with the requirements of the provisions  
20 of the statute, Chapter 10, which would create an obligation  
21 to make some evaluations on groundwater analysis?

22 A Yes.

23 Q Would you indicate what those sections are, please?

24 A In 40-10-10(2)(c), I can synthesize what's--it's kind of  
25 a long section. But under Part 3--



1 Q That is on page 21 of your statute. Sorry.

2 MR. LARSEN: What page?

3 MS. ROBERTS: 13.

4 THE WITNESS: Under (2)(c) the Act states that:

5 "The permit application shall contain, among other  
6 things, a determination of the probable hydrologic consequences  
7 of the mining and reclamation operations, both on and off the  
8 mine site with respect to the hydrologic regime, quantity and  
9 quality of water in the surface and groundwater systems, inclu-  
10 ding a collection of sufficient data for the mine site and sur-  
11 rounding areas, so that an assessment can be made by the Division  
12 of the probable cumulative impacts of all the anticipated mining  
13 in the area upon the hydrology of the area."

14 Q (By Ms. Roberts) That was the paragraph?

15 A It was paraphrased. What was pertinent.

16 Q Is the material that has been supplied by Co-op sufficient  
17 for you to make the assessment of this probable hydrologic--of  
18 the probable hydrologic consequences of the area?

19 A No. The regional information provided by the applicant  
20 does not address the same specific characteristics of the  
21 groundwater system such that the cumulative impacts of mining  
22 can be assessed.

23 Q Mr. Smith, are you familiar with the general geology of  
24 the area of the Bear Creek Canyon Mine?

25 A Yes.



1 Q Using the maps that we have pinned up here, would you  
2 give the Board a general overview of what this geology may be?  
3 A Yes. The first map I have pinned up here is a mine plan  
4 map submitted by Co-op on April 30, 1984, to the scale of 1  
5 inch equals 200 feet. And it addresses Sections 23 and 26.  
6 If I can find it here. I was going to refer you to the handout  
7 of the map we had here. Those are the centers of 23 and 26.

8 The Bear Canyon permit area is a stippled line on this  
9 map, and it extends up further to the north, and it comes down  
10 here to the end of Section 26 and goes east-west and then goes  
11 down across and has sort of a pie-sliced shape on the southern  
12 extent.

13 The 1984 through 1988 permit term, which is what the MRP  
14 addresses, their five-year permit term is outlined in pink,  
15 right here, and each of the years, the sequence of mining are  
16 within this pink area. So it's--this is 1988, 1984, '85, '86,  
17 and '87.

18 Now, within this five-year permit term, I've colored in  
19 blue the mining activity that's taken place. And if you cal-  
20 culate the area of blue--and this dark blue indicates an area  
21 where the pillars have been cut and pulled, right here and  
22 right here. The light blue, the pillars have been cut there,  
23 and they aren't pulled yet. And the current mining activity  
24 is taking place in this aquamarine colored area.

25 And if you calculate this area of blue mining versus the





1 total pink area enclosed, about 50 percent of the five-year  
2 permit term has been mined.

3 The green area is mining external to the five-year permit  
4 term into areas that presumably will be mined in 2016 to 2033.

5 I have also put faults on here. These two are indicated  
6 on the map. I have just highlighted them in red. This fault  
7 defines the permit boundary towards the east. This fault has  
8 been detected by Co-op and put on their map, and I just extended  
9 it down and up a bit with a question mark, because it may extend  
10 further.

✓  
11 These two faults are from other professional geologic pub-  
12 lications by Speaker and Doling, and I inserted them on the  
13 western side of the permit boundary. The reason I've entered  
14 these faults is because there are springs in the area which  
15 indicate groundwater, and the springs, I wanted to indicate a  
16 potential relationship between the springs and the faults.  
17 This spring right here is called the Co-op Development Spring.  
18 It's intermittent. This spring right here is Bear Canyon  
19 Spring, which is a Huntington City municipal water source and  
20 flows at an average of 100 to 300 gallons per minute.

21 This is Birch Spring, and I had to extend their map a  
22 little bit to get it on, and it is several hundred feet from  
23 this fault. These are closer to the fault and approximately  
24 200 feet away.

25 Q Mr. Smith, would you indicate on the board approximately



came down different

1 how much coal has been removed from that area that you have  
2 shaded in green?

3 A You can do a calculation on the volume of coal removed here  
4 by using the figures given in the MRP. Co-op states that on  
5 an average, Bear Canyon seam is 10 feet thick. You can then  
6 take this area here and assume a thickness of 10 feet, calculate  
7 the volume, and subtract out the volume that these pillars  
8 which are remaining would--the volume of the pillars subtracted  
9 from the total volume would give you the approximate volume of  
10 coal. And it's on the order of 400,000 tons.

11 Q Now, you indicated that the area shaded in blue within the  
12 pink outlined area is approximately 50 percent removed.

13 A Right.

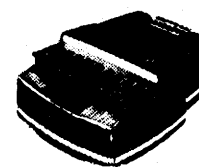
14 Q Now, that permit term begins in 1984, is that correct?

15 A Right.

16 Q In your opinion, and based upon the data submitted by  
17 Co-op, can you project when the permit term area of land in  
18 pink will be completely mined out?

19 A Right. You can take the volume of coal that's been mined  
20 here, the total volume; and with the volume that has been mined  
21 to date, there are some dates here on the mine plan that indi-  
22 cate, as these tunnels were driven, what the dates were.  
23 And I came up with average rate of mining of approximately  
24 2,000 tons a day.

25 There is in this area on the order of about 360,000 tons



1 already mined. There is about that much left. You can divide  
2 2,000 into 360,000 and come up with, if they continue to mine  
3 at the same rates that we can derive from this map, 200 more  
4 days, and they will have mined out up through '88.

5 Q What is your opinion, Mr. Smith, as to the necessity of  
6 making an early assessment of the statutorily required--of your  
7 statutory requirement for an evaluation upon the effects of  
8 mining on the groundwater hydrology?

9 A Inasmuch as approximately 50 percent of the 1984 to '88  
10 permit term has been mined, the preventive intent of the statutes  
11 and regulations is being negated, effectively being negated,  
12 by the current status of the mine, and if you can project these  
13 rates.

14 The preventive intent is being totally negated by the  
15 rate in which this is being mined out.

16 Q Has the Division ever received a sequence map such as  
17 this prior to this one that you're indicating to us at this  
18 point?

19 A No. Well, not in this detail. It was simply a map.  
20 An earlier submittal had several lines that said 1980 to '85,  
21 but none of the detail on the actual location of the mining and  
22 the defined limits of the sequence. It is a very sketchy map.

23 Q Rather than have you sit down, we will just move on to the  
24 next section, and you can go through the maps. Now, you stated  
25 earlier that you are familiar with UMC 783.24 and 25.



1 A Right.

2 Q Can you explain what is required by 783.24 up there, or  
3 do you need to come back here?

4 A No. It's on page 77 of the regulations. And under 783.24,  
5 Maps, General Requirements, the regulation states:

6 "The permit application shall include maps showing:

7 "(b) The boundaries of land within the proposed permit  
8 area upon which the applicant has the legal right to enter and  
9 begin underground coal mining activities;

10 "(c) The boundaries of all areas proposed to be affected  
11 over the estimated total life of the underground coal mining  
12 activities, with a description of the size, sequence and timing  
13 of the mining of sub-areas for which it is anticipated that  
14 additional permits will be sought."

15 Q What will this information, this permit boundary informa-  
16 tion, enable the Division to accomplish? What does the Division  
17 need this information for?

18 A The Division needs it to find a permit boundary to know  
19 the area that's going to be affected and where are they going--  
20 proposing to mine.

21 Q Has this boundary remained fairly consistent with the  
22 maps that have been submitted by Co-op Mining?

23 A No. As a matter of fact, there is contradictory permit  
24 boundaries, and on the Plate 2-1, which is entitled, "Permit  
25 Area Map," the permit boundary is the stippled line, again.



1 And you can--I've put it in over here where the boundary would  
2 be on Plate 2-1, and it's this green dashed line, which indi-  
3 cates mining has taken place outside of their proposed permit  
4 area.

5 Q Earlier there was testimony to the effect that in the MRP,  
6 it was stated that anything that was contradictory, the most  
7 recent submittal would be the correct one. If that is the  
8 case, has there been a more recent map than this indicating a  
9 contradictory permit boundary map line?

10 A The Plate 6 A, I think it is, on the right-hand side here,  
11 is entitled, "Geologic Map." And it also shows a permit boun-  
12 dary, which indicates, if this one is the current permit  
13 boundary, that they have in fact--are today mining outside of  
14 their permit boundary.

15 Q If in fact this is the correct map, and this is the cor-  
16 rect permit boundary, then the remaining five, six maps in the  
17 MRP are incorrect; is that correct?

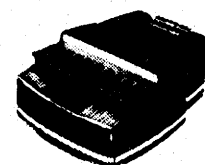
18 A That's right.

19 Q That includes the permit area map--

20 A The permit area map, the geologic map, would be incorrect.

21 Q Thank you. With regard to the section enumerated 783.25,  
22 would you explain what is required by that section? What has  
23 been determined incomplete in this provision?

24 A 783.25 is on page 78 of the regulations, and it states that:  
25 "The application shall include cross-sections, maps, and



1 plans showing: (d) All coal crop lines and the strike and  
2 dip of the coal to be mined within the proposed mine plan  
3 area; (e) Location and extent of known workings of active,  
4 inactive, or abandoned underground mines, including mine open-  
5 ings to the surface within the proposed mine plan and adjacent  
6 areas."

7 Q Would you explain the deficiencies with regard to (d)  
8 initially?

9 A Okay. Co-op submitted this map on June 25. It's called  
10 Plate 6 A, and it's Exhibit M. And the location of the strike  
11 and dip symbol is down here, and it indicates that it's on any  
12 typical geologic map, the strike and dip symbol is put on the  
13 unit. This is below it. It indicates it's beneath the coal,  
14 which is this dashed line, and it's in a unit other than the  
15 coal.

16 Also, the dip symbol, according to their own mine plan  
17 maps and other work in the area by other geologists, is revers-  
18 ed. These rocks are not dipping in this direction. They are  
19 in fact dipping this way, to the southeast, instead of, as  
20 indicated here, to the northwest.

21 Q Why is this information important to the evaluations that  
22 you need to make?

23 A In conjunction with the groundwater, it would be useful  
24 to have the correct dip symbol, because if the rocks are dip-  
25 ping in this fashion, the groundwater may be recharged some-



1 where and flowing along the tabular stratigraphic units; for  
2 example, the Castle Gate Sandstone, or other units, towards the  
3 southeast and intersecting a fault plane and then being direct-  
4 ed in another direction, especially with these springs.

5 It may be the source of the springs. This is a potential.  
6 It would be nice to have several strike and dip symbols on either  
7 side of these faults to see if the attitude of the beds of the  
8 rock units changes and a correct symbol that agrees with  
9 other work. I don't believe this dip is correct.

10 Q Would you explain the deficiencies of Section (e)?

11 A Under Section (e), nothing has been submitted. And I  
12 took the--there is information from the Trail Canyon Mine, and  
13 I put it on this handout. And this is the type of information  
14 we're seeking. The known workings of active, inactive, or  
15 abandoned underground mines.

16 Q I think you can sit down, Mr. Smith. Do you want to sit  
17 down for a minute?

18 A Yes.

19 Q Moving on to Section UMC 784.20, and that is on page 90,  
20 would you again describe what the requirements are of that  
21 section, if you can read it?

22 A Under Section 784.20 on page 90, the minimum requirements  
23 state that:

24 "The application shall include a survey which shall  
25 show whether structures or renewable resource lands exist



1 within the proposed permit and adjacent area and whether sub-  
2 sidence if it occurred could cause material damage or diminu-  
3 tion of reasonably foreseeable use of such structures or renew-  
4 able resource lands."

5 And the definition of a renewable resource land on page  
6 12 of the regulations, it's defined:

7 "Renewable resource lands mean aquifers and areas for the  
8 recharge of aquifers and other underground waters, areas for  
9 agriculture or silvicultural production of food and fiber, and  
10 grazing lands."

11 Q What has Co-op submitted in response to this section?

12 A They have submitted a survey of agricultural and silvicol-  
13 tural areas for the production of food and fiber and grazing  
14 lands.

15 Q Have they made any statements with regard to seeps or any-  
16 thing of that nature?

17 A Yes. They surveyed for seeps, springs.

18 Q For seeps and springs.

19 CHAIRMAN WILLIAMS: What is it that is missing?

20 THE WITNESS: A survey--a survey of areas for that  
21 recharge of aquifers and other underground waters.

22 Q (By Ms. Roberts) Would you describe what a recharge area  
23 is for the Board?

24 A It would be an area where surface water, whether from  
25 snowmelt or precipitation would be absorbed into the ground





1 and enter the groundwater system.

2 Q Has Co-op indicated in their MRP at any place that there  
3 is or is not an aquifer in there within the permit boundary or  
4 the adjacent area?

5 A Yes. In Chapter 7, Underground Water Hydrology, they  
6 state that there is a regional aquifer in the area and adjacent,  
7 in the mine plan area and adjacent areas.

8 Q So they have in fact identified an aquifer within the  
9 area, but they have not included that for the purpose of sub-  
10 sidence control; is that correct?

11 A Correct.

12 Q If in fact a survey would indicate, which their survey has  
13 not, because they have not completed it, but if the survey  
14 did indicate that an aquifer was in existence, would that re-  
15 quire some other issue that would go to completeness?

16 A Yes. It would require, according to 784.20, that a deter-  
17 mination be made as to whether the renewable resource or re-  
18 charge area or aquifer would be impacted by subsidence and, if  
19 necessary, if it would be impacted, in other words, provide a  
20 detailed subsidence control monitoring--subsidence control  
21 plan, monitoring plan, and litigation plan for impact.

22 Q That is a typo in the rule book. It is supposed to be  
23 mitigation, not litigation. So essentially there is a two-part  
24 completeness situation there. You have not indicated the  
25 second part merely because the first part is not there. So



1 you do it, and you cannot make a determination as to the  
2 second?

3 A Correct.

4 Q As to whether the second part is necessary?

5 A Correct.

6 Q Again, what is the purpose for this base line data?

7 What does the Division need it for, and why is it a complete-  
8 ness issue?

9 A Under subsidence?

10 Q That's correct.

11 A Okay. We need to identify and characterize the renewable  
12 resource lands, in particular, the aquifers and recharge areas,  
13 such that we can--that we can determine whether subsidence will  
14 affect the lands and provide--if they are--if it is determined  
15 that there is a potential for impact, the mine plan will require  
16 a detailed subsidence control plan, monitoring plan, and miti-  
17 gation plan for damage to these resource lands.

18 Q Touching briefly on the addendum that was added to the  
19 most recent response by the Division to Co-op Mining with  
20 regard to the persons identified in the MRP who wrote the  
21 chapters, would you explain what you were looking for in that?

22 A Yes. The chapter on geology contains numerous statements,  
23 an example of which would be: "The author interprets the  
24 following," "In the author's opinion." And this author is not  
25 identified. And I would like to have the identity of that



1 author, the credentials of that author, presented, so that I  
2 can make a professional judgment as to the quality of this  
3 work, these interpretations and opinions.

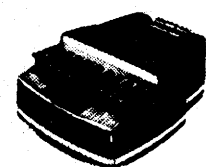
4 There is also the strike and dip symbol. I have no idea  
5 who took it. And it is in my opinion from what I know of the  
6 area incorrect, and I would--I have no basis for evaluating the  
7 quality of this work, and I would like to know that. And this  
8 is under 717.23 that this information should be provided.

9 MS. ROBERTS: I have no further questions at this  
10 time.

11 CROSS-EXAMINATION BY MR. ROTHEY

12 Q Mr. Smith, at the outset of your testimony, counsel direc-  
13 ted your attention to 40-10-10, and you talked about subpara-  
14 graph 2(b): "an accurate map or plan to an appropriate scale  
15 clearly showing the lands to be affected as of the date of the  
16 application," et cetera. Contained in this same paragraph is  
17 the following: "but nothing in this chapter shall be construed  
18 as vesting in the Division--" Excuse me. Subparagraph (c).  
19 It should be in (c), talking about hydrology. You stated that  
20 there needed to be a determination of the probable hydrologic  
21 consequences of the mining and reclamation operations. In  
22 that respect do you differ with the opinion of Mr. Callister  
23 as testified to before this Board?

24 A I am unable to form an opinion, because there is no base  
25 line information provided in the mine plan on whether there



1 are more than one aquifer, two aquifers, whether the faults are  
2 acting as conduits. So I can't form an opinion as to ground-  
3 water system.

4 Q But he did, did he not?

5 A In his testimony he had opinions.

6 Q And he testified Bear Canyon Spring was below the mine,  
7 did he not?

8 A Yes.

9 Q And he testified that it was recharged from snowmelt into  
10 an aquifer on Gentry Mountain; is that correct?

11 A That's his opinion. He has no data to back it up. I  
12 don't know whether he's right or wrong.

13 Q Well, is that probable hydrologic consequences that he  
14 testified to, or is that specific hydrologic consequences?

15 A He is expressing an opinion on the probable.

16 Q Probable hydrologic?

17 A You know, it's just as probable that that isn't the case.

18 Q Continuing in Subsection (c):

19 "But this determination" that you refer to "shall not be  
20 required until such time as hydrologic information on the gener-  
21 al area prior to mining is made available from an appropriate  
22 federal or state agency." Has that information been requested  
23 of your Division by Co-op?

24 A I'm not aware. I'm not aware of whether they requested that  
25 or not--Co-op.



1 Q Have you supplied it?

2 A I am aware that Co-op references Danielson's regional  
3 groundwater resource paper, which is the most comprehensive  
4 groundwater paper in the area, in the regional area.

5 Q And you find that to be an unreliable treatise also?

6 A No.

7 Q That is reliable?

8 A It's the most comprehensive report in the regional area--  
9 for a regional area.

10 Q Does it have sufficient base line data in it for you to  
11 determine the probable hydrologic consequences of this mining  
12 operation in the area?

13 A It cites specific data for Co-op's property. It's a re-  
14 gional report for Huntington and Cottonwood basins.

15 Q With respect to the site specific issue, I assume that you  
16 have reviewed paragraph 7.1.2.2 on page 6 of the addendum sub-  
17 mitted on April 27 of this year dealing with quality and  
18 quantity of groundwater?

19 A In the mine plan? Yes.

20 Q And you have also submitted Table 7.3 with respect to this  
21 comparison of Bear Canyon spring water quality dated October  
22 3, 1977, et cetera?

23 A That's a table in the mine plan? I have to get it.

24 Yes. I have looked at it. It's from Danielson.

25 Q And Table 7.4 is also from Danielson?



1 A Right. Correct.

2 Q So far, then, we haven't done enough base line data from  
3 Dr. Callister or Danielson for you to determine the probable  
4 hydrologic consequences of this mining operation?

5 A This data refers to springs. There is also the mine water,  
6 and the actual aquifers, for water quality information.

7 Q Did the mine plan in fact deal with the water that was  
8 found in the mine and the fact that it was all being utilized  
9 for the bathhouses or for drinking water or for watering down  
10 the coal surface for dust control?

11 A That's what the mine plan states it's being used for.  
12 There is some discharge from the mine also.

13 Q Have you determined that from an on site inspection?

14 A Yes.

15 Q Where does it discharge to?

16 A It discharges above the coal chute, where the coal comes  
17 out of the mine right by the conveyor. This is a pipe that  
18 discharge comes out of.

19 Q Into the sedimentation pond?

20 A It drips out of this pipe and goes down a slope, and I'm  
21 not certain where it goes. I didn't follow it.

22 Q Doesn't the MRP address that?

23 A I would--I'm not sure that would be it. The surface hy-  
24 drologists would take a look at that.

25 Q You didn't deal with surface hydrology?



1 A No, sir.

2 Q So your testimony isn't concerned with that pipe that may  
3 be dripping out into the mine area?

4 A It isn't mine water coming out. It's groundwater.

5 Q Are you concerned with--

6 A With groundwater, yes.

7 Q And you say you haven't determined where that was going?

8 CHAIRMAN WILLIAMS: What's the relevance of that?

9 MR. ROTHEY: I don't know.

10 CHAIRMAN WILLIAMS: Then go on to another subject.

11 MR. ROTHEY: Thank you, Mr. Chairman.

12 Q (By Mr. Rothey) How long have you been employed with the  
13 Division?

14 A Since April 23, 1984.

15 Q '84?

16 A Yes.

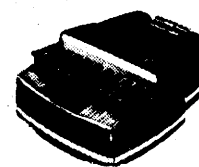
17 Q So you're not familiar with the MRP of Jenwal?

18 A No, sir.

19 Q You are familiar in your testimony with the fact that  
20 Co-op asserts as base line data that there are no springs or  
21 seeps in the area of the mine or in the area of potential sub-  
22 sidence? Do you remember that?

23 A On the--surface renewable resource survey, they state they  
24 didn't identify that.

25 Q Do you presently have any information that would contra-



1 dict that assertion?

2 A No.

3 Q Now, you've indicated that you would personally like to  
4 see Co-op identify the author of certain geological information,  
5 so that you can assess, I guess, both the quality and the veri-  
6 fiability of that data?

7 A Yes.

8 Q In that respect, are you relying upon any particular pro-  
9 vision of the regulations?

10 A Under 771, it states that a person who collects and ana-  
11 lyzes and interprets the data shall be identified. 771.23, I  
12 believe it is.

13 Q Yes. Subparagraph (e). "The application shall state the  
14 name, address, and position of officials supplying the infor-  
15 mation."

16 A Correct, yes.

17 Q Has that been supplied?

18 A Not for the person who is making the interpretations in  
19 the geology section. Not to my knowledge.

20 Q So that the bibliography at the end of the geology sec-  
21 tion is not sufficient?

22 A The author's opinion--I still have no idea who the author  
23 is. Danielson, when he is referenced and cited, he is in the  
24 bibliography, and I understand what the quotes mean and so on.  
25 But I don't know who the author is that's making the interpre-





1 tation.

2 Q So the information may be there, but you don't know who  
3 the author is?

4 A And his credentials.

5 Q Or his credentials?

6 A Correct.

7 Q And you'd like to know that?

8 A Yes, I would.

9 Q That is for the reason that you want to make sure that the  
10 data supplied is reliable data?

11 A I can make a professional judgment as to quality.

12 Q As to the quality?

13 A Yes.

14 Q You use that term?

15 A Yes.

16 Q You're looking for a qualitative analysis of this MRP, are  
17 you not?

18 A I'm looking for the quality of data submitted.

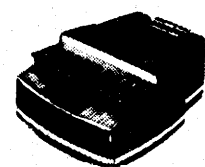
19 MR. ROTHEY: Thank you. No further questions.

20 REDIRECT EXAMINATION BY MS. ROBERTS

21 Q Mr. Smith, how much area does the Danielson report cover  
22 approximately?

23 A Three hundred square miles.

24 Q Approximately how much area does this Co-op Bear Creek  
25 Canyon Mine cover?



1 A Roughly two square miles.

2 Q Mr. Smith, do you have any indication that there is  
3 groundwater in the area?

4 A Yes. There is the spring information. There is also mine  
5 water, as we mentioned, that is being discharged from the mine.  
6 There is water from the mine that's being used in bathhouses  
7 and offices, and the mining machines require approximately 20  
8 to 22 gallons of water per minute, and this is mine water also.

9 So there is water occurring in the mine. There is no  
10 water quality analysis that's been provided for this, and there  
11 is the regional studies that indicate that there are regional  
12 aquifers. In Danielson's report he also states that there are  
13 channel sand aquifers in the Blackhawk Formation. He also  
14 states that the Castle Gate Formation sporadically occurs as a  
15 local aquifer. And so there is evidence, the direct evidence,  
16 of groundwater from the mine and from springs and the potential  
17 for other types of aquifers, not just the regional aquifer, in  
18 this two-square mile area.

19 MS. ROBERTS: No further questions.

20 CHAIRMAN WILLIAMS: Do you propose to introduce  
21 Exhibits L, M, and N?

22 MS. ROBERTS: Yes. These two maps over here were  
23 submitted as part of the MRP and are kept by the Division as  
24 part of their business records.

25 CHAIRMAN WILLIAMS: You're referring to Exhibits M



1 and N, one is a map called Co-op Mining Company--

2 MS. ROBERTS: And Co-op Mining Company geologic map.

3 CHAIRMAN WILLIAMS: They were both submitted by  
4 Co-op as part of the application?

5 MS. ROBERTS: As part of their application, that's  
6 correct.

7 CHAIRMAN WILLIAMS: Do you have any objection to  
8 receiving Exhibits M or N?

9 MR. ROTHEY: No objection.

10 CHAIRMAN WILLIAMS: We will receive Exhibits M and  
11 N and Exhibit L. I think that's what that is. It's a map that  
12 delineates the sequence of mining. It was also submitted as  
13 part of the MRP, Co-op's MRP; but it has been shaded and out-  
14 lined, and some things have been added to it by the Division  
15 of Oil, gas, and Mining and that exhibit was prepared by you?

16 THE WITNESS: Correct.

17 CHAIRMAN WILLIAMS: Mr. Rothey, do you have any  
18 objection to exhibit L?

19 MR. ROTHEY: No. I don't have any objection. I  
20 would like to ask a couple of more questions about that, if that  
21 was submitted by Co-op.

22 CHAIRMAN WILLIAMS: We will receive Exhibit L.

23 (Exhibits L, M and N were marked  
24 for identification and received  
in evidence.)

25 MS. ROBERTS: I have no further questions.



RECROSS-EXAMINATION BY MR. ROTHEY

1  
2 Q With respect to Exhibit L, Mr. Smith, as I understand it  
3 from the proffer or representation of counsel, this was sub-  
4 mitted as part of the MRP by Co-op Mine. Is that correct?

5 A Correct.

6 Q Who placed on this, if I can stand where I'm not blocking  
7 everyone's view, who placed on here this shaded outlined area?

8 A The permit area as indicated by the stipple? That is  
9 Co-op's permit areas--

10 Q So Co-op indicated that they are mining in this area?

11 A They indicate that that is their permit area. The stippled  
12 line is their permit boundary.

13 Q When was this submitted?

14 A April 30, 1984.

15 Q That area, of course, includes the area that you say is  
16 outside of the permit area?

17 A No. Co-op has defined their permit area over here as the  
18 green dashed line, and they indicate they're mining outside.

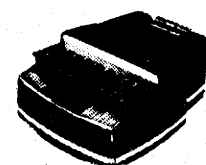
19 Q This, of course, is the latest submittal?

20 A No. The geologic map over here on the right was submitted  
21 June 25.

22 Q All right.

23 A And it has--the other--

24 Q Apparently in your testimony on redirect examination, you  
25 indicated that the data with respect to the amount of water



1 and the flow of water from the mine has been supplied?

2 A No.

3 Q Where did you get your information?

4 A I--I know that a mining machine needs 20 to 22 gallons per  
5 minute. And I have talked to the company that Co-op purchased  
6 their mining machines from. I understand they have three of  
7 these machines, and in their mine plan they claim Co-op--Co-op  
8 states that they will run three shifts a day, 240 days a year.  
9 And if you -- you can multiply 22 gallons a minute times 16--  
10 or, 24 hours a day, or whatever--however--well, for two shifts.  
11 I'm sorry. Times 20 gallons a minute, times 240 days, and you  
12 end up with something like eight million gallons of water per  
13 year being utilized in the mine that's flowing into the mine  
14 from various sources, faults or roof bolts or wherever, aquifers.

15 Q Is any of that water reclaimed?

16 A I don't know.

17 Q You don't know?

18 A It's--I don't know how much water they're using. I know  
19 that it indicates that there is water in the mine. I'd like  
20 to know more about it.

21 Q Well, they supplied the data that there is water in the  
22 mine? Is that correct?

23 A Not in terms of quantity or quality. They indicate that  
24 there is a minimal amount of water in the mine.

25 Q And they have also suggested in the MRP that the amount



1 of water available from the mine is not of such a quantity as  
2 to result in a discharge into the stream; is that correct?

3 A I believe so. As I recall.

4 Q The other extrapolations that you have made based on cer-  
5 tain assumptions presume that none of this water is recycled  
6 or reclaimed in the operation of the mining equipment?

7 A I'm more concerned with the water that occurs in the mine.  
8 I just know--I know that a mining machine needs water. I know  
9 that it has to be coming from somewhere in the mine. I'd like  
10 to know the volume and the water quality of it.

11 Q Do you have any information available to you, Mr. Smith,  
12 that would give you the base line data necessary to make the  
13 computations with respect to hydrology in the area?

14 A Not for this--the most comprehensive report is Danielson.

15 Q Is it your opinion as an expert with DOGM that more site  
16 specific information is required?

17 A Yes. And that's why it's determinative--

18 Q Is that available presently?

19 A Not that I know of.

20 Q Do you have an opinion as to the best means of collecting  
21 that data?

22 A The most common means would be by bore hole.

23 Q Core drilling?

24 A Bore hole drilling.

25 Q Bore hole, as opposed to core drilling?



drilling/doing

1 A Doing a well and running geophysical logs. Not necessar-  
2 ily coring.

3 Q Do you have an opinion as a geologist how helpful that  
4 bore hole drilling would be in a fractured area?

5 A It would be new data, which is always useful.

6 Q Are you looking for useful data here?

7 A I'm looking for any kind of data here.

8 Q But in fact, Mr. Smith, if I were to drill a bore hole in  
9 one location that intercepted a fractured area indicating water,  
10 aquifer type, rechargeability, I could in fact drill another  
11 hole ten feet away and not encounter any water; isn't that  
12 correct?

13 A Yes.

14 Q How many holes would you expect would be necessary in  
15 order to gather this useful data?

16 A I would require the information generated by the first well  
17 before I would make any decision about further drilling.

18 Q Have you suggested that to Co-op?

19 A No, I haven't.

20 Q In fact, Mr. Lee Wimmer of Horrocks Engineering, has  
21 asked you for that data, hasn't he?

22 A As a matter of fact, I've never spoken to Mr. Lee Wimmer.

23 MR. ROTHEY: Thank you. No further questions.

24 THE WITNESS: You're welcome.

25 CHAIRMAN WILLIAMS: Mr. Smith, are there other ways



1 of obtaining the kind of information that you seek other than  
2 a bore hole?

3 THE WITNESS: There is always a possibility of dri-  
4 ving--when we're talking bore holes, that could mean boring in  
5 the mine. And there is a tunnel extending up quite a ways  
6 north--or not--it doesn't necessarily--or, always mean drill-  
7 ing from the surface down. Bore holes can be drilled in the  
8 mine. The information generated from this tunnel up here on  
9 in-mine water may assist and help determine what type of drill-  
10 ing you want to do; and I have none of that information. Maybe  
11 driving a lateral tunnel. I have no information to make  
12 determinations on the specific program.

13 CHAIRMAN WILLIAMS: Do you have any reason to think  
14 that the water problems encountered in this mine are incredibly  
15 unique as compared to other coal mines?

16 THE WITNESS: No.

17 CHAIRMAN WILLIAMS: Thank you.

18 FURTHER REDIRECT EXAMINATION BY MS. ROBERTS

19 Q I have one question. A few minutes ago it seemed that we  
20 were getting into a discussion of the discharge quality and  
21 quantity of the water, or the quality and quantity of the water  
22 in the mine as it relates to discharge. Isn't it in fact, as  
23 related to groundwater, your concern is with the source and  
24 possible disruption of any aquifers or perched water tables in  
25 the area?



Tables/Cables  
↓



1 A Yes.

2 MS. ROBERTS: I have no further questions.

3 FURTHER RECROSS-EXAMINATION BY MR. ROTHEY

4 Q With respect to that, Mr. Smith, a disruption of perched  
5 aquifers as it relates to subsidence would indeed only occur  
6 above the mine, and not below the mine? Isn't that correct?

7 A Yes.

8 Q So that your suggestion to the Chairman that you could  
9 drill from the mine would in fact require that you drill upwards,  
10 is that correct?

11 A The potential for regional aquifer--in fact--let me clear  
12 this up. There is a regional aquifer below the mine. The  
13 recharge area may be above the mine, it may in fact--the  
14 recharge may move through the mine. So the regional aquifer  
15 below, if this flow is somehow disrupted, it may change the  
16 whole regional aquifer below. The water level may drop. We  
17 don't know. There is no information on the regional aquifers  
18 or other potential aquifers above the mine.

19 Q The only disruption that you could possibly be talking  
20 about, however, is the disruption that would occur above the  
21 mine?

22 A In terms of physical movement of rock, yes. In terms of  
23 disrupting the flow regime in the subsurface, the actual pre-  
24 sence of the mine or mining through faults, which may be con-  
25 duits, may disrupt the flow and, therefore, affect the location,



1 extent, depth, of aquifers below the actual mine.

2 Q If it has already been determined that there are no seeps  
3 or springs above the mine, is it fair to say as a matter of  
4 probable hydrologic consequence that there are no aquifers  
5 above the mine?

6 A It may indicate that all the water is moving directly down  
7 into lower aquifers between the mine and the surface and below  
8 the mine.

9 Q Either on the site of the mine or in adjacent areas?

10 A Correct.

11 Q Subsidence, of course, would not occur in adjacent areas  
12 to the mine as a result of this mining operation?

13 A Correct. I don't believe so.

14 MR. ROTHEY: Thank you.

15 CHAIRMAN WILLIAMS: Does the Board have any questions  
16 for this witness?

17 MR. GARR: Just one, Mr. Smith. You have made ref-  
18 erence a number of times to subsidence. Is there evidence of  
19 subsidence as the direct result of Co-op Mining's operations?

20 THE WITNESS: To date, no. But there is subsidence  
21 monitoring stations aren't over this mine, as I recall their  
22 locations.

23 MR. GARR: There hasn't been any, then, to your  
24 knowledge?

25 THE WITNESS: Not to my knowledge, no.



1 CHAIRMAN WILLIAMS: The Board is reserving its right  
2 to come back and question all the witnesses. Do you have fur-  
3 ther witnesses?

4 MS. ROBERTS: I have no further witnesses, Mr.  
5 Chairman.

6 CHAIRMAN WILLIAMS: Mr. Rothey?

7 MR. ROTHEY: No further questions. I have witnesses.  
8 Mr. Chairman, I will be calling as witnesses Mr. Wendell Owen  
9 of Co-op Mine, Mr. Mel Coonrod, Co-op Mines, and Mr. Lee  
10 Wimmer, Horrocks Engineering, if they would be sworn.

11 (Three witnesses were duly sworn to testify.)

12 CHAIRMAN WILLIAMS: Mr. Rothey, you previously had  
13 some witnesses subpoenaed, is that correct?

14 MR. ROTHEY: Yes. That would be Mr. Wimmer, who is  
15 here and has been sworn, and Mr. Larry Dalton of the Division  
16 of Wildlife. In light of the DOC of July 13 and the addendum  
17 of July 17, no issue has been raised with respect to the infor-  
18 mation supplied by Mr. Dalton, and ~~so~~ there is no need to have  
19 him testify.

20 CHAIRMAN WILLIAMS: Wasn't there a third?

21 MR. ROTHEY: We subpoenaed Mr. Callister, Mr. Chairman;  
22 but I believe in light of the submittals that we have made, his  
23 testimony would just be duplicitous of what has already been  
24 submitted.

25 CHAIRMAN WILLIAMS: Will you proceed.



↓ A at one period of time (etc.) (4 or more part of line 24)

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WENDELL OWEN

called as a witness on behalf of Co-op, having been  
first duly sworn, testified as follows:

DIRECT EXAMINATION BY MR. ROTHEY

Q Mr. Owen, would you state your name and current business  
address, please?

A Wendell Owen. Business address is Box 300, Huntington,  
Utah.

Q Where are you employed, Mr. Owen?

A At Co-op Mining Company.

Q For how long?

A For--at this time--I think I've been employed there for  
a number of years that weren't consecutive. At this particu-  
lar time, five years.

Q In what capacity?

A As business manager.

Q In that capacity is it your responsibility to interface  
with the Department of Oil, Gas, and Mining of the State of  
Utah as it relates to interim permits, violations thereof, and  
the MRP, which is the subject of today's hearing?

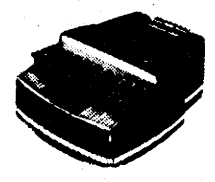
A Yes.

Q In that capacity do you work with anyone else at Co-op  
Mine to develop the information required?

A Yes, sir. Mr. Coonrod.

Q Anyone else?

A At one period of time we had a Mr. Scott



1 Nordness who was working with us in that capacity.

2 Q He is no longer working with you, is that correct?

3 A That's correct.

4 Q With respect to the MRP which is the subject of this  
5 hearing, has Scott Nordness prepared any of the information  
6 contained in the latest MRP?

7 A Yes, he has.

8 Q With respect to the information that he prepared, has that  
9 been identified as coming from him or prepared by him?

10 A I think it has.

11 Q All right. Sometime beginning in, as testified to by  
12 Dr. Nielson, June 18, 1980, as a result of your efforts on be-  
13 half of Co-op Mine, did Co-op Mine receive an interim permit  
14 approval from the Division?

15 A Yes, it did.

16 Q In connection with that interim permit approval, was that  
17 for the purposes of operating at Bear Canyon Mine?

18 A Yes.

19 Q And the attendant facilities at the portal of that mine,  
20 is that right?

21 A Yes.

22 Q As a result of the operation of that mine, have you  
23 caused to be prepared an application for a permanent permit?

24 A Yes.

25 Q That is the application that is here before us today?



↓ period

1 A Yes.

2 Q When did you first submit that MRP in relationship to the  
3 schedule which is defined as Exhibit J?

4 A That would be the March 23 submittal, 1981.

5 Q March 23, 1981?

6 A Yes.

7 Q Did Scott Nordness assist you in the preparation of that?

8 A No.

9 Q Concurrent with the preparation of that MRP, were you  
10 also processing violations and other conformance requirements  
11 as it related to the interim permit?

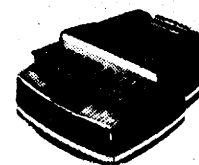
12 A Yes.

13 Q What amount of time did you spend between March 23, 1981,  
14 and October 4, 1982, dealing with violations or alleged viola-  
15 tions of the operating plan for the interim permit?

16 A I don't have a total amount of time. Also at the same  
17 time we were dealing with a permit for the Trail Canyon site,  
18 which we were handling separately at the Division's advice,  
19 rather than as one mine plan. So we had violations and the  
20 correction of those violations in both the Trail Canyon and the  
21 Bear Canyon operations.

22 Q Did that in any way affect your ability to respond to  
23 apparent completion reviews submitted by the Division as it  
24 relates to the MRP?

25 A Yes. It took a lot of my time that I could have put on



1 the MRP.

2 Q In connection with all of that activity, did you prior to  
3 coming here today prepare a summary of all of the things that  
4 you have been required to deal with as it relates to Co-op Mine  
5 in Bear Canyon and Trail Canyon since the submission of the  
6 MRP of March 23, 1981?

7 A This one deals entirely with Bear Canyon. Trail Canyon  
8 was in addition to this.

9 Q All right. Referring specifically to Trail Canyon, Mr.  
10 Owen, and calling your attention to Plate No. 3-3 in the MRP,  
11 are there maps in that MRP that identify mines and the extent  
12 of mining in areas adjacent to the Bear Canyon Mine area?

13 CHAIRMAN WILLIAMS: Could you identify which MRP  
14 you're referring to?

15 MR. ROTHEY: Yes.

16 A Yes. It identifies the Co-op Trail Canyon Mine.

17 Q (By Mr. Rothey) The MRP that the Chairman has referred  
18 to is in fact the MRP which is the subject of this apparent  
19 business review here today; is that correct?

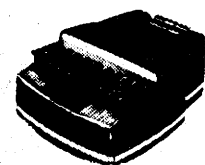
20 A Yes.

21 CHAIRMAN WILLIAMS: This is the MRP for the Bear  
22 Creek Mine?

23 MR. ROTHEY: Yes. Bear Canyon Mine.

24 CHAIRMAN WILLIAMS: Bear Canyon Mine.

25 Q (By Mr. Rothey) And specifically, Mr. Owen, Plate Nos.



1 3-3, Subsidence Map, does identify the Trail Canyon Mine and  
2 the extent of that mine; is that correct?

3 A Yes.

4 Q Are you personally aware of any other mines in areas  
5 adjacent to the Bear Canyon Mine?

6 A No.

7 Q So that with respect to the claim of deficiency or incom-  
8 pleteness as set forth in the July 13, 1984, letter, the  
9 Plate No. 3-3 does in fact identify the Trail Canyon Mine and  
10 its extent?

11 A Yes.

12 Q As you have testified, you were a party to and a represent-  
13 ative agent of Co-op Mining in the notice of intention that re-  
14 sulted in the issuance of the interim permit; is that correct?

15 A Yes.

16 Q As part of that issuance of the interim permit, you ob-  
17 tained services of Bruce Callister of the State Department of  
18 Geology; is that correct?

19 A He was indirectly--as far as obtaining his services, he  
20 was called in as a witness for Huntington City and Castle  
21 Valley Special Services. They were the ones that obtained his  
22 services, but his services were performed in the Bear Canyon  
23 Mine permit area at their request.

24 Q All right. At the request of Castle Valley and Huntington,  
25 Dr. Callister appeared to testify in that interim period for





1 the purpose of determining whether there would be any material  
2 impact on the Bear Canyon spring; is that correct?

3 A That's correct.

4 Q And you were present when he testified?

5 A Yes.

6 Q You were aware of his conclusions with respect to that?

7 A Yes.

8 Q As a result of that testimony, an interim permit was  
9 granted, is that correct?

10 A Yes. As a result of that testimony, the Board determined  
11 that there would be, as brought out here, no material damage  
12 from any operation.

13 Q With respect to that information, did you include that in  
14 the MRP as it relates to the Bear Canyon Mine?

15 A Yes.

16 Q Besides that, what other efforts have you made to obtain  
17 hydrologic data for inclusion in this MRP?

18 A I engaged the service of Mr. Wimmer of Horrocks Engineers.

19 Q And the services of Mr. Wimmer, did they relate to under-  
20 ground water as opposed to surface water, or what was the ex-  
21 tent of his services?

22 A It related more to the surface water.

23 Q All of the information that Mr. Wimmer obtained was sub-  
24 mitted as part of this MRP: is that correct?

25 A I'd like to make a correction there. Mr. Wimmer, I believe,



1 did invite some information on underground water. I believe  
2 that's correct.

3 (Mr. Wimmer nods head.)

4 Q (By Mr. Rothey) What specifically do you remember was  
5 submitted as it relates to underground water?

6 A At the point that Mr. Wimmer is submitting, I myself was  
7 not personally that much involved in writing, and I'm not quite  
8 as familiar with that. Mr. Coonrod at that point--or, previous  
9 to that point--had taken over most of my duties of coordinating  
10 this information, and Mr. Wimmer provided the information that  
11 was placed in the MRP by Mr. Coonrod. And so I really am not  
12 quite too familiar with just what was involved.

13 Q All right. Besides the services of Mr. Wimmer and the  
14 testimony of Mr. Callister, which you have submitted as part  
15 of this MRP, did you undertake any other efforts to find out  
16 about groundwater in the area? Specifically, at any time have  
17 you requested of the Division that they supply you information  
18 respecting groundwater aquifers in the area?

19 A There were--there was some drilling done to the north in  
20 the area beyond our permit area to the north by other companies.  
21 And when I first submitted--submitted the first MRP, I put in  
22 there that I hoped to obtain some information from that drill-  
23 ing. And I was unable to obtain it from the company that did  
24 it. And I requested several times in person and at least  
25 once in writing to the Division, if they could explain to me



1 if the information were the information from those drill holes.

2 I was given--I was--in trying to find out what agency it  
3 was that had that information, I checked with the Utah Geolog-  
4 ical Mineral Survey, and they told me the Division of Oil, Gas,  
5 and Mining was the Division, was the party of the State where  
6 those drill logs had to be recorded. So I made the request to  
7 the Division of Oil and Gas and Mining that I had to get that  
8 information. I was not supplied with it, no.

9 Q In connection with this MRP, Mr. Owen, you have apparently  
10 received on several occasions determinations of completeness  
11 from the Division. Have you personally participated in a review  
12 of those DOC's as submitted--prepared by the Division?

13 A There has been at least two instances where we arranged  
14 a meeting with members of the staff. One case in particular  
15 at the request of Barbara Roberts--not the request, but at the  
16 suggestion--in order to avoid some of this submitting and reply  
17 and submitting and reply, we had that meeting.

18 So we did have a meeting with them.

19 Q Was that in September of last year?

20 A Yes, I believe. As I recall.

21 Q Who attended that meeting?

22 A Myself and Mel Coonrod from the Co-op. I don't recall  
23 all of them in the Division.

24 Q Did anyone--

25 A Dave Darby was there.



1 Q Who else?

2 A Lynn Kunzler.

3 Q Were any of these people representing the Division as it  
4 relates to the hydrologic issues of this MRP?

5 A Yes, Dave Darby was the hydrologist at that time.

6 Q Did you have a discussion with him at that time concerning  
7 any possible deficiencies and how they might be corrected?

8 A Yes.

9 Q Specifically, did you discuss with him the drilling of  
10 bore holes or the taking of core samples?

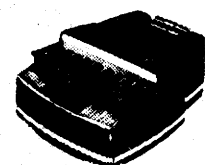
11 A That was one of the times that I requested the information  
12 from the drilling that was done at the North Fork property.

13 Q Did you discuss with him the necessity of Co-op drilling  
14 their own bore holes or taking core samples?

15 A I can't remember if that was discussed at that time.

16 Q All right. Did you make notes, or did you receive a  
17 determination of completeness from Mr. Darby as it related to  
18 the hydrology at that time?

19 A Yes. What the meeting was, we had already a determination  
20 of the completeness, and we had to list deficiencies. And so  
21 Mr. Coonrod and myself prepared a draft as an answer, and in-  
22 stead of submitting it as an answer, took it to that meeting  
23 to discuss it with the Division to see if that was what they  
24 were asking for or if it was something in addition they were  
25 asking for.



1 Q What did they say?

2 A In some cases they said that what we had submitted was  
3 what they wanted. In other cases, they said, "No, that isn't  
4 what we want." We took notes of what they said they wanted and  
5 included that.

6 Q That submittal was in October of 1983, is that correct?

7 A Yes, sir.

8 Q And that submittal also was pursuant with another deadline  
9 that they had given you?

10 A Yes, that's correct.

11 Q That was approximately 30 days after you had this meeting,  
12 is that correct?

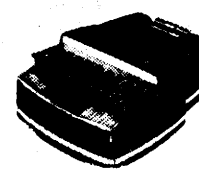
13 A Yes.

14 Q Then the Division some five months later sent another  
15 determination of completeness to you as it relates to that sub-  
16 mittal in October?

17 A Yes.

18 Q Now, Dr. Nielson testified in her direct examination that  
19 in fact the submittal, which is the one in front of you now,  
20 and the one now pending before the Division, was substantially  
21 revised in October of 1983 over the prior submittals. Can you  
22 tell me if that is in fact the case and, if so, why that was  
23 the case?

24 A Yes, sir. That is the case. The first submittal I made  
25 before had the services of either Mr. Nordness or Mr. Coonrod



1 reformatting

1 was, of course, rejected as inadequate by the Division. And  
2 then, since subsequently we had been given these additional  
3 things in a determination of completeness to add to it, and so  
4 that it became to where we had several submittals. And it was  
5 difficult for the Division to determine what we did have.

6 And in a meeting with Dr. Shirazi, in looking it over, he  
7 made that specific request, that we coordinate everything,  
8 eliminating where we had made a repetition, in that the first  
9 submittal was inadequate, and we had submitted the same thing  
10 with additional information. So that we eliminated any dupli-  
11 cation, and at that time they gave us a suggested format. He  
12 requested we do that. Also he wanted such detail as more room  
13 in the margins for their notations and so on. So that was  
14 when we revised it and came back with a new submittal.

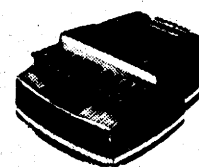
15 Q So you in fact at the suggestion of Dr. Shirazi had to  
16 retype substantial portions of the MRP as it had been previously  
17 submitted?

18 A Yes, that's correct.

19 Q And you reformatted it according to the instructions that  
20 they gave you in October or September?

21 A Yes, that's correct.

22 Q With respect to the various determinations of completeness,  
23 sometimes referred to as an ACR, what has been your experience  
24 in terms of the consistency of those recommendations and  
25 determination of incompleteness?



1 A There has every time been new items entered in. Even the  
2 time, like I say, that we had that meeting, and supposedly  
3 everything then--in fact, we asked them the question, "If we  
4 have this, is that complete now?" And then when five months  
5 later another determination for completeness came back, there  
6 were new items that were not in the other items.

7 Q New items? What do you mean by new items?

8 A I mean items that hadn't been brought to our attention  
9 before as far as the determination of completeness.

10 Q That in fact is also true as it relates to at least two  
11 items in the July 13 and July 17 DOC's, which are the limited  
12 issues here today; is that correct?

13 A Yes, that's correct.

14 Q Previously you had not been told about the strike and  
15 dip symbols, had you?

16 A No.

17 Q Was that strike and dip symbol, as indicated on Plate  
18 No.---excuse me--not a plate number, but Exhibit No. N--was that  
19 something that was done before the June 28 submittal, if you  
20 know?

21 A To go back a little bit, one of the things that they re-  
22 quested on one of their determinations of completeness, they  
23 said that the maps there--there again, the maps had been pre-  
24 pared over a period of time--they said that they weren't all  
25 the same, in that, oh, the nameplate and the legend were not



1 in the same place. And they requested that we redo all the  
2 maps and put them in identical format. And so we engaged the  
3 services of an engineer to do that, and that was at that time  
4 that this map was made. And I didn't look at the map again  
5 before it was submitted.

6 Q With respect to your experience in this MRP and the review  
7 of the determination of the completeness, what has been your  
8 experience in dealing with people at the Division of Oil, Gas,  
9 and Mining? Have you been dealing with the same person all  
10 the way through?

11 A No.

12 Q In what way has that presented difficulties in completing  
13 this application?

14 A There again, as in that case there, the people that were  
15 there at that meeting--

16 Q Which meeting are you referring to?

17 A The meeting I was referring to again is where we came with  
18 the draft to make it complete. And then when it was actually  
19 reviewed, why, some of the personnel were different. So the  
20 ones reviewing it weren't necessarily the ones there at the  
21 meeting.

22 Q In connection with the interfacing that you did with the  
23 personnel at the Division of Oil, Gas, and Mining, were there  
24 occasions when you submitted information which was subsequently  
25 either lost or misplaced or unaccounted for?





1 A Yes.

2 Q Be specific. When and where? And what was it?

3 A There were two cases. The one case was one that--well,  
4 let's see. This was--wasn't on the MRP. This was on the modi-  
5 fication.

6 CHAIRMAN WILLIAMS: Is this with respect to items  
7 addressed in the July 13 letter?

8 THE WITNESS: No.

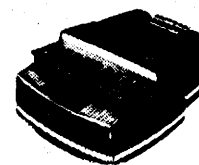
9 Q (By Mr. Rothey) Withdraw that question. With respect to  
10 the July 13 letter, Mr. Owen, what efforts have you made to  
11 complete a soil analysis of the soil which is located on the  
12 Campbell property near Elko?

13 A At that time the samples had already been sent to a lab-  
14 oratory for the analysis and I'm not sure, I think, received,  
15 but as has been mentioned, we were told not to make any more  
16 submittals.

17 Q But you had previously told the Division in your MRP that  
18 you would submit the analysis as soon as it was available to  
19 you?

20 A Yes.

21 Q Now, you have heard the testimony here today with respect  
22 to the number of cubic yards required to rehabilitate this  
23 area and restore it to both its original pristine state. Do  
24 you have any reason to agree or disagree with the testimony of  
25 Mr. Hooper?



1 A Only in the number of acreage he figured we had to cover.  
2 Since 10 acres was the amount of what is determined--well,  
3 called disturbed area, in that that is what has to drain into  
4 the sedimentation pond, rather than run out into the natural  
5 drainage doesn't mean that all of that area has actually been  
6 disturbed or had any topsoil or material removed. A lot of  
7 places it's a steep slope where it hasn't been removed and  
8 won't be. It also included areas of contemporaneous reclama-  
9 tion.

10 CHAIRMAN WILLIAMS: Is that reclamation that has  
11 occurred or will occur?

12 MR. ROTHEY: Has occurred.

13 Q (By Mr. Rothey) Approximately how much of the area has  
14 already been reclaimed?

15 A Without checking I couldn't say from memory.

16 Q Is that indicated on any of the plates or maps that have  
17 been submitted in the MRP?

18 A Yes, that should have been submitted on the reclamation.

19 Q That can be calculated mathematically?

20 A That's correct.

21 MR. ROTHEY: I have no other questions of this  
22 witness.

23 CHAIRMAN WILLIAMS: Ms. Roberts.

24 CROSS-EXAMINATION BY MS. ROBERTS

25 Q Mr. Owen, you testified that Plate 3-3 that was submitted



1 as part of your mining and reclamation plan indicated the  
2 underground workings of the Trail Canyon Mine; is that correct?

3 A I don't know that I said that it indicated the under-  
4 ground workings. I said it indicated the mine there and the  
5 extent of it.

6 Q Mr. Owen, are you aware of what UMC 783.25 related to  
7 cross-section maps and plans--are you familiar with that sec-  
8 tion? That section specifically states that--and that is on  
9 page 78 of the regulations--"A map shall indicate the location  
10 and extent of known workings of active, inactive, or abandoned  
11 underground mines, including mine openings to the surface  
12 within the proposed mine plan and adjacent areas." I have the  
13 map, the plate, right here. Would you indicate the extent of  
14 the boundary of Trail Canyon and the workings?

15 A This indicates the extent of the boundary. It doesn't  
16 indicate the workings.

17 Q The extent of the boundary, including this area here?

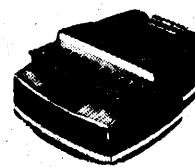
18 A That is listed as the permit area.

19 Q That is the permit area and--

20 CHAIRMAN WILLIAMS: Speak up, please.

21 Q (By Ms. Roberts) Including the mine openings and the  
22 extent of the workings?

23 A The extent of the workings is not on that map. I assume,  
24 since I was submitting the two of them simultaneously were  
25 only separated because of the Division's request, but I had



1 both maps there in the submittals.

2 Q Is this boundary the same map boundary as appears on these  
3 other more recent maps?

4 A The--

5 Q Are you aware if there are any differences?

6 A The only difference I can see is it didn't follow the  
7 fault line on down here (indicating).

8 Q Mr. Owen, you indicated you were relatively busy during  
9 the initial mine plan time period for the Bear Creek Canyon  
10 Mine. Is there any reason why Co-op Mining was spending so much  
11 time on correcting violations?

12 A Yes. We were attempting--in other words, it was new to  
13 us. We were attempting to bring the ground itself into com-  
14 pliance, and there were some violations, one in particular in  
15 regards to the so-called mine development waste area, or what-  
16 ever it was called, where we had the machinery stored in Trail  
17 Canyon, where they required us to--we had old machinery, and  
18 there was some scrap there, and they required us to either re-  
19 move all that--now, that had been stored there as long as the  
20 mine had been there, I think some 40 odd years. They told us  
21 to remove it, remove the topsoil, put in a plan to have it as  
22 a storage area and to put the machinery back or remove it per-  
23 manently and reclaim it, which, like I say, it took a consider-  
24 able amount of time and effort on those things.

25 It resulted in a violation and a failure to abate the



1 situation, which was later withdrawn; but it was, like I say,  
2 it was an area that had been there--the material had been on  
3 that ground and had been used for that sense--I mean, it was--  
4 there are some cases that it was that type of thing. There are  
5 other cases, it was a valid violation. Like I say, we were  
6 trying to learn and trying to come into compliance.

7 Q Is that the only violation you were attempting to remedy  
8 during that period of time?

9 A What's that?

10 Q Is that the only violation that you were attempting to  
11 remedy during that period of time?

12 A No. I gave that as an example.

13 Q With regard to Mr. Callister's testimony that as part  
14 of your mining and reclamation plan, are you aware of any data  
15 other than opinion evidence that was presented by Mr. Callister  
16 at the June 1980 hearing before this Board?

17 MR. ROTHEY: Objection. I suppose that she's charac-  
18 terizing the evidence from Mr. Callister; and this Board has  
19 already made the determination about that. If it was opinion  
20 evidence or otherwise, I think it's a mischaracterization.

21 MS. ROBERTS: My question was as to whether there was  
22 any technical or any other type of data that was presented as  
23 evidence at that time.

24 CHAIRMAN WILLIAMS: Well, I think you've both been  
25 quite free with summarizing and characterizing the testimony



1 of Mr. Callister. You may answer, if you're able to, Mr. Owen.

2 THE WITNESS: I'm not an expert on it. His complete  
3 testimony is included in the MRP.

4 Q (By Ms. Roberts) I understand. I've read the transcript  
5 from the hearing. My question is relating to, was there any  
6 technical data submitted at that time to support his opinion?

7 CHAIRMAN WILLIAMS: If you know.

8 Q (By Ms. Roberts) If you know.

9 A I don't know if there was any.

10 Q Thank you. Are you aware of the methods that Mr. Callister  
11 used in preparing his opinion for that hearing?

12 A I don't know as far as preparation of that. I know that  
13 he spent considerable time on site, both outside and inside  
14 the mine.

15 Q Considerable time, meaning--an estimate?

16 A Several days.

17 Q Several days? Less than 10? Less than 5?

18 CHAIRMAN WILLIAMS: If you know.

19 Q (By Ms. Roberts) If you know. Excuse me.

20 A I don't know.

21 Q Are you aware of whether or not Mr. Callister has reviewed  
22 your mining and reclamation plan?

23 A No, I'm not.

24 Q You're not aware?

25 A I'm not aware.



1 Q Mr. Owen, have you ever supplied site specific information  
2 on the groundwater regime specifically as it relates to the re-  
3 quirements of the regulation on the thickness and methodology  
4 of aquifers and the remainder of 783.15?

5 A I would prefer that questions regarding the technical  
6 things here would be directed to some of the people I have  
7 hired for technical--

8 Q That would be Mr. Coonrod?

9 A Mr. Coonrod and Mr. Wimmer.

10 Q Thank you. Mr. Owen, have you yourself written any sec-  
11 tions of the MRP?

12 A Yes.

13 Q Do you recall which sections those are?

14 A One in particular would be the first part that says,  
15 "Ownership and control of land," and so on.

16 Q Have you written any of the technical portions of the MRP?

17 A No.

18 Q Thank you. Mr. Owen, you testified that you've never  
19 been told previously about the requirement for strike and dip  
20 or, let me say strike and dip information was incomplete?  
21 Is that correct?

22 A This was the first time that I was told that it was incom-  
23 plete, when it was setting on the incomplete list.

24 Q I refer you to three separate instances, the determination  
25 of completeness and/or TD's dated May 11, 1984; August 31, 1983;



1 and March 27, 1984, in which that particular section was de-  
2 termined incomplete by the Division?

3 CHAIRMAN WILLIAMS: Is there a question?

4 Q (By Ms. Roberts) Is there a question? I refer you to  
5 that. Are you aware of that section?

6 A I was not aware of it that we had submitted a map on which  
7 that information was not correct. We were made aware and were  
8 told that it was incomplete. And we made arrangements to have  
9 an engineer submit that.

10 Q That map was submitted on June 25, 1984?

11 A Yes.

12 Q Thank you. Mr. Owen, you testified that the chemical an-  
13 alysis and other data with regards to the soil analysis for the  
14 soil substitutes is in your possession at this time; is that  
15 correct?

16 A Yes. That's correct.

17 Q Has the Division been supplied with this at any time in  
18 the past?

19 A No. Not with--not on that soil from the Campbell process.

20 Q Mr. Owen, how long have you been aware that you've had to  
21 have that kind of soil analysis on the remainder of the soil  
22 substitute required for reclamation?

23 A I've been aware for some time that was required, but there  
24 was considerable discussion back and forth between us and the  
25 Division as to how we were going to take care of the problem



1 of not having sufficient soil on the property. As Mr. Hooper  
2 stated, there were different options that were discussed, and  
3 a lot of that time was taken up in deciding what we were going  
4 to do.

5 MS. ROBERTS: Thank you. I have no further ques-  
6 tions.

7 MR. ROTHEY: No redirect.

8 CHAIRMAN WILLIAMS: Very well. We're going to recess  
9 until 8 o'clock tomorrow morning.

10 Mr. Rothey, at that time it would be helpful to the  
11 Board if you could take the July 13 letter and July 17 supple-  
12 ment, perhaps briefly state your position with respect to those  
13 various items.

14 I don't mean to limit your presentation in any way,  
15 but, for example, your contention is that "On such and such an  
16 item, we feel that the application is complete, and that's our  
17 position."

18 That would be helpful.

19 MR. ROTHEY: I would be glad to do that.

20 (The hearing adjourned at 4:57 p.m.)

21 \* \* \* \*

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1 SALT LAKE CITY, UTAH, FRIDAY, JULY 27, 1984, 8 A.M.

2 \* \* \* \*

3 CHAIRMAN WILLIAMS: We will resume our consideration  
4 of Docket No. 84-040. Mr. Rothey.

5 MR. ROTHEY: Mr. Chairman, at the conclusion of yes-  
6 terday's evidentiary hearing, you asked me to come back this  
7 morning and summarize where I thought we were and at least  
8 where I thought our position was as it relates to the DOC's on  
9 July 13 and July 17. Is that--

10 CHAIRMAN WILLIAMS: Yes, sir.

11 MR. ROTHEY: In connection with that summary, is it  
12 the Chairman's desire that I do that in light of the evidence  
13 that has been presented, or only in light of the MRP which has  
14 been submitted?

15 CHAIRMAN WILLIAMS: Whatever you prefer. I'm not  
16 trying to limit you. I'm just trying to give the Board a road  
17 map of where you're headed, so we understand the issues that  
18 we're going to be asked to resolve.

19 MR. ROTHEY: All right. I would prefer to summarize  
20 the information to date that has been submitted by evidence.

21 CHAIRMAN WILLIAMS: I was really thinking in terms  
22 of a summary of your position, not necessarily of the evidence.

23 MR. ROTHEY: In a word, then, a summary of my posi-  
24 tion is that we are straining at gnats and swallowing coal  
25 mines; that indeed as it relates to the July 13, 1984, DOC,



1 the groundwater information deficiency as noted by the Division  
2 fails to take into consideration the evidence that has been pre-  
3 sented with respect to surface water by the Horrocks Engineer-  
4 ing group at the instance of Mr. Lee Wimmer, a professional  
5 engineer, and fails to take into consideration the evidence  
6 which has been previously accepted by this Board and used as  
7 a basis for determining no probable hydrologic consequence to  
8 the hydrology in the area based upon the mine operation as pro-  
9 posed in the interim permit.

10 CHAIRMAN WILLIAMS: Is it correct, then, that your  
11 position on 783.15 is that the application is complete?

12 MR. ROTHEY: The application is complete. We do not  
13 make a contention that that may be technically adequate, but we  
14 are uncertain as to what additional technical information may  
15 be required in order to make that.

16 CHAIRMAN WILLIAMS: What about 783.24, the boundaries  
17 of the--I'm just going through the July 13 letter.

18 MR. ROTHEY: As the Board can see from the exhibits  
19 that are hanging here on the wall. In fact, Co-op Mine has  
20 presented evidence which is contradictory. Contradictory evi-  
21 dence, however, doesn't go to the issue of completeness, but  
22 whether or not it is technically accurate.

23 We would to the extent that it is required by the  
24 Board in order to determine the issue of completeness, we would  
25 be prepared to proffer and put on evidence. I would proffer



1 that the map which is hanging on the wall--I don't know what  
2 it was designated--

3 CHAIRMAN WILLIAMS: L.

4 MR. ROTHEY: L. Map No. L was taken from a mylar  
5 which was originally given to Co-op Mines from COP Development,  
6 the owner of all of the property designated in the stippled  
7 area; that it was the intention of the operators at the time  
8 to generally follow in their mine plan the outcrop mine, which  
9 extends into the area, which Mr. Smith noted yesterday was  
10 outside of the mine plan area in Exhibits M and N; that as a  
11 result of an initial survey by Co-op Mine, it was determined  
12 that that small portion of the area on Exhibit L which lies  
13 outside of the designated areas of M and N contained burned  
14 coal, which was not worth recovery.

15 As of the present date, we feel that we may have  
16 mined outside of the areas designated in M and N, but to a  
17 degree less than 5 percent of the total area, and into private  
18 ground as opposed to government ground involving royalties; and,  
19 as a consequence, under the normal practices of the Division,  
20 we can submit a request for an inadvertent boundary change, and  
21 that would be granted strictly on the basis of the letter.

22 If we determine in our survey that is in fact the case,  
23 we will present that evidence to Dr. Nielson.

24 CHAIRMAN WILLIAMS: At this point you do not have a  
25 map--at least, none of these maps identified the correct



1 boundaries?

2 MR. ROTHEY: Yes, M and N do identify the correct  
3 boundaries. So they would be complete in that.

4 MS. LUNDBERG: The correct boundaries, except you  
5 were probably going to submit a change, because you've probably  
6 gone outside?

7 MR. ROTHEY: Yes. But we have not done a survey ac-  
8 cording to the requirements of federal law that we do that  
9 every six months. That recent survey has not been completed;  
10 and, as I said, what we believe to be less than 5 percent, if  
11 we are outside of it at all.

12 With respect to the issue of cross-section maps and  
13 plans, we believe, as designated in the March 30 determination  
14 of completeness, that Plate 3-4, as well as Plate 3-3, designate  
15 and show the location of known and existing mines and the ex-  
16 tent of those mines in the area adjacent to the proposed mine  
17 plan.

18 And in that sense, we contend that we are complete.

19 As it relates to 784.13(b)(4), I think that it is  
20 clear from the testimony that we have in fact presented good  
21 and substantial evidence as to the amount of material, the top-  
22 soil material, and where it would be obtained from; and, of  
23 course, as we said yesterday, we had submitted samples of the  
24 material from the Campbell property located near Elmo--that's  
25 actually in Emery County--for analysis, and that information



1 is available to us now. It was not available at the time of  
2 the submission, that was new information that was requested in  
3 the March 30 DOC.

4 The subsidence control plan--

5 CHAIRMAN WILLIAMS: Are you saying that is complete  
6 except for the submission of this analytical data?

7 MR. ROTHEY: Well, and indeed, Mr. Chairman, it  
8 would be complete in the sense that in the MRP that we submitted,  
9 we specifically told that we would be getting that soil analy-  
10 sis and as soon as it would be available it would be added.  
11 Since that was first noted to us on March 30 of this year, we  
12 have been undertaking as expeditiously as practicable to get  
13 that information.

14 Subsidence control plan. The testimony of Bruce  
15 Callister, we believe, presents competent evidence of the  
16 probable consequence on the hydrology of the area as it relates  
17 to subsidence; and his specific testimony, which this Board  
18 based its opinion on initially, is included in the MRP, and he  
19 states without equivocation that he does not believe its sub-  
20 sidence will have an adverse effect on the hydrology of the  
21 area.

22 We are prepared today to give additional empirical  
23 evidence of three years of operation since this plan--that is,  
24 the interim permit--was approved, that no adverse consequence  
25 has resulted to the Bear Spring water flow, and that



1 we are in fact in a contractual arrangement with the  
2 Huntington City, and that contract has been included in the MRP,  
3 requiring us to insure water quality and quantity.

4 CHAIRMAN WILLIAMS: Is the empirical evidence you  
5 propose to submit in addition to information that is in the  
6 MRP?

7 MR. ROTHEY: Well, I don't propose to submit it as  
8 to the issue of completeness, but it would be in addition to the  
9 MRP. As far as the addendum is concerned, the applicant is  
10 not provided information about the persons or organizations  
11 that collected and analyzed data given in the MRP. Except with  
12 the help of the testimony of Mr. Smith yesterday, we believe  
13 that all of the reports that have been submitted have identified  
14 Mr. Lee Wimmer in accordance with the statute, both with respect  
15 to his name, his address, who he works for and his official  
16 position; and they have also identified Mr. Larry Dalton of the  
17 Division of Wildlife of the State of Utah, his address, and his  
18 official position.

19 All other names are names of persons who are employed  
20 with Co-op Mine and, of course, Co-op Mine is identified in  
21 the MRP. As it relates to the July 17, 1984, DOC, we have  
22 been unable until this morning to get ahold of Mr. Dan Guy, a pro-  
23 fessional mining engineer, who prepared Exhibits M and N.

24 In our conversation with Mr. Guy this morning, he has  
25 indicated to us that as far as he is concerned, the strike





1 therefore  
1 and dip symbol on exhibit M is in fact correct. He will verify  
2 that, but it strikes me without qualification that that is a  
3 technical problem rather than a completeness problem and,  
4 therefore, submit that we are complete as it relates to that  
5 issue.

6 CHAIRMAN WILLIAMS: Could you give me the engineer's  
7 name?

8 MR. ROTHEY: Dan Guy.

9 Mr. Chairman, one point that I would notice a devia-  
10 tion from my assertions, Dan Guy has prepared many, if not  
11 most of the maps that we have included in the MRP, and his  
12 official stamp appears on those maps, but his address does not.  
13 So we may be deficient there.

14 CHAIRMAN WILLIAMS: All right. Would you like to go  
15 ahead?

16 MR. ROTHEY: We call Mr. Lee Wimmer.

17 HAROLD LEE WIMMER

18 called as a witness on behalf of Co-op, having been  
19 duly sworn, testified as follows:

20 DIRECT EXAMINATION BY MR. ROTHEY

21 Q Mr. Wimmer, would you state your name and your current  
22 business address, please?

23 A Harold Lee Wimmer. I work for Horrocks Engineers in  
24 American Fork, One West Main.

25 Q What is your professional employment, Mr. Wimmer?



1 A I'm a registered professional engineer.

2 Q In the State of Utah?

3 A In California.

4 Q What is your education?

5 A I have a bachelor of engineering science degree from  
6 Brigham Young University in 1968 and a master of science in  
7 Civil Engineering, University of Southern California, in 1972,  
8 with an emphasis on the surface and groundwater hydrology.

9 Q Any other education?

10 A I have, of course, attended many seminars.

11 Q What seminars specifically have you attended as it relates  
12 to surface and groundwater hydrology?

13 A Well, I'm a member of the National Water Well Association,  
14 as well as other associations, Water Pollution Control Feder-  
15 ation, American Waterworks Association. I'm a member of the  
16 National Water Well Association, Water Pollution Control  
17 Federation, the American Waterworks Associations, American  
18 Society of Civil Engineers. And they periodically conduct  
19 seminars, which I attend. So over the years that I've been in  
20 professional practice, I've attended many.

21 Q What is your work experience, Mr. Wimmer?

22 A After graduating from college in 1968, I went to work for  
23 the Los Angeles Department of Water and Power for five years  
24 and worked in planning, aqueduct operation which included  
25 groundwater pumping and monitoring and so on. And then for



1 the last eleven years I've been the vice president in charge  
2 of engineering at Horrocks Engineers. The firm specializes in  
3 water type of engineering, water supply, which includes wells,  
4 springs, development, distribution and treatment. We do other  
5 things. Sewers, collection, treatment, roads, bridges, surveys.

6 MR. ROTHEY: Will the commission accept the qualifi-  
7 cations of Mr. Wimmer as a professional as it relates to ground-  
8 water and underground water hydrology?

9 CHAIRMAN WILLIAMS: Any objection, Ms. Roberts?

10 MS. ROBERTS: No.

11 CHAIRMAN WILLIAMS: Yes, we will.

12 Q (By Mr. Rothey) In connection with the MRP which is the  
13 subject of this hearing, have you been engaged by Co-op Mining  
14 to undertake any professional analysis of the hydrology in the  
15 region located around the Bear Canyon Mine?

16 A Yes.

17 Q When were you engaged to do that?

18 A I believe my first contact with Mr. Owen was 1980 sometime,  
19 where I was retained to do specific analysis on surface hydrol-  
20 ogy.

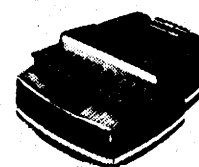
21 Q Of the Bear Canyon Mine?

22 A Yes. And Trail Canyon.

23 Q And Trail Canyon?

24 A Yes.

25 Q Trail Canyon is an area adjacent to Bear Canyon; is that



1 correct?

2 A That's correct.

3 Q In connection with that, have you compiled the data con-  
4 cerning the groundwater--that is, the underground water, as well  
5 as the surface water in the area?

6 A My involvement in groundwater has been more recent. Dur-  
7 ing the recent--I don't know if middle is the correct word--  
8 but the October 26, or whatever the date was, 1983. My duties,  
9 I guess, were expanded into the groundwater submission, and I  
10 either prepared or had prepared under my direction Chapter 7,  
11 the hydrology section of the MRP, which included groundwater.

12 Q All right. In connection with that, what specific work  
13 did you do, and what specific treatises did you reference in  
14 preparing that groundwater information?

15 A Well, the references are in the MRP, but we went to the  
16 Oil, Gas and Mining people and got some references there.  
17 U. S. Geological Survey, got information there. Essentially  
18 what we did is a literature search of available literature.  
19 Of course, we were also presented with a copy of Dr. Callister's  
20 testimony in the previous matter that related to the mine. From  
21 that information we prepared the groundwater section in the MRP.

22 Q What work did you do in the mine itself?

23 A I did not go underground. Observations at the mine site  
24 were, you know, physical on site observations outside the mine  
25 site. And I have also observed the area from the air.



1 Q Other than the Bear Canyon spring, were you able to ascer-  
2 tain whether there were other seeps and springs located on the  
3 mine site?  
4 A I did not find any.  
5 Q You did not find any as a result of your survey?  
6 (Witness nods head.)  
7 Q And as a consequence, have you made such a note in the MRP?  
8 You found none?  
9 A I don't remember specifically that, but I think that--the  
10 inventory shows that.  
11 Q All right. And all of the information that you gathered  
12 from these various sources and technical publications has been  
13 included in the MRP as submitted in October and any addendums  
14 submitted thereafter?  
15 A Well, I wouldn't use the termination all. We gleaned  
16 what we determined to be in our professional opinion those  
17 matters, factual matters, or opinion, that they were opinions  
18 of reputable people that were pertinent to that section.  
19 MR. ROTHEY: No further questions. Oh, excuse me.  
20 Q (By Mr. Rothey) Recently, Mr. Wimmer, you were involved  
21 in a conference with the Division staff concerning the ground-  
22 water information; is that correct?  
23 A We have had several conferences, yes.  
24 Q Being more specific, have you had a conference concerning  
25 the necessity of either bore drilling or core drilling for the



1 purpose of determining additional--or, ascertaining additional  
2 groundwater information?

3 A That's difficult--you know, that's a tough question to  
4 answer. My opinion is that the people I've talked within  
5 the Division are desirous of inclusion of a drilling program.

6 Q Have you asked--

7 A That's an opinion I've gleaned from conversation with  
8 them. More than one conversation.

9 Q Have you asked them specifically whether it was their  
10 desire?

11 A Not in so many words, no.

12 Q Have you asked them what additional information they would  
13 like you to provide?

14 A Yes.

15 Q What have they told you?

16 A Well, I think--I think the answer, if I'm interpreting it  
17 correctly, is, "More data."

18 Q More data. Would you consider that as a technical defi-  
19 ciency as it relates to the work that you've already performed?

20 A Without more information, yes.

21 MR. ROTHEY: No other questions.

22 CHAIRMAN WILLIAMS: Ms. Roberts.

23 MS. ROBERTS: I have no questions of this witness.

24 CHAIRMAN WILLIAMS: Does the Board have any questions  
25 of this witness?



1 MR. LARSEN: No.

2 MS. LUNDBERG: I do. Mr. Wimmer, if there were ever  
3 water being produced in the mine, would that be relevant in  
4 terms of the groundwater hydrology in the area?

5 THE WITNESS: There is a minor amount of water pro-  
6 duced in the mine. It's my opinion, as stated in the MRP, that  
7 it's potentially perched water.

8 MS. LUNDBERG: But you didn't go in the mine to ex-  
9 amine?

10 THE WITNESS: No, but I talked to Wendell Owen.  
11 Of course, he has a lot of experience in the mine. And I also  
12 read testimony of other people who had been in the mine.

13 CHAIRMAN WILLIAMS: Mr. Wimmer, if you were asked to  
14 obtain more data, what kind of program would you recommend for  
15 getting that data?

16 THE WITNESS: As far as I know, we have exhausted  
17 the literature type of search. Unless the gentlemen that did  
18 the reports that we've analyzed have more information that's  
19 not been published in the report, which may be a possibility,  
20 I really know of no way to get that information other than  
21 through a drilling program. But in my opinion, the literature,  
22 the previous literature, and the data, you know, the observa-  
23 tions at the site, of limited subsidence, very little mine  
24 water encountered, would tend to support the conclusions that  
25 were reached by others before me that the recharge for the



1 areas on the Gentry Mountain, in that general vicinity, goes  
2 downward except where it intercepts, you know, some other types  
3 of things, and ends up in the Star Point Sandstone are perched  
4 water, I think a small little water development. The protection  
5 of the spring is covered by contract. It is spelled out in the  
6 MRP.

7 CHAIRMAN WILLIAMS: Would a drilling program be an  
8 expensive undertaking?

9 THE WITNESS: The water in the area partially moves  
10 through the fault zone, and I think there's about three in that  
11 canyon.

12 CHAIRMAN WILLIAMS: Three faults?

13 THE WITNESS: Yes. And I guess--it would really be  
14 my professional opinion that, yes, you could get some addition-  
15 al analytical data from the drilling; but the Star Point  
16 Sandstone--most of the water is below the mine and would nor-  
17 mally drill, go down below the mine--and we would normally  
18 drill, go down below the mine. I think this type of informa-  
19 tion you get might have some academic bearing, but I really  
20 don't think it will tell you much that is not known already.

21 CHAIRMAN WILLIAMS: Would it be expensive to get that  
22 information?

23 THE WITNESS: Yes, I think when you consider the cost  
24 of restoration as part of it, you know. The steep mountainside.  
25 You get in there with a drill rig and drill and then restore





1 the site as required by the regulations, it would be expensive.

2 CHAIRMAN WILLIAMS: Do you have any idea how expensive?

3 THE WITNESS: I decline to comment on that.

4 CHAIRMAN WILLIAMS: Beg your pardon? I beg your  
5 pardon?

6 THE WITNESS: I don't have an exact figure.

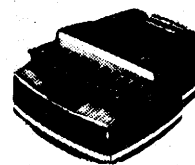
7 MS. LUNDBERG: How much would it cost to measure the  
8 flow of water in the mine?

9 THE WITNESS: I hope you have an appreciation for  
10 what happens when you encounter perched water. As you're min-  
11 ing and you come upon perched water, you can have quite a bit  
12 of water for a short period of time. And then that water de-  
13 creases. And the experience of Co-op Mining in both Trail  
14 Canyon and Bear Canyon has been that as they mined farther in,  
15 the flow of water, particularly is encountered, diminishes.  
16 In other words, perched water, the water that's there, bleeds  
17 out, and then it's kind of gone.

18 MR. GARR: That's pretty much standard in any mine?

19 THE WITNESS: Any mine. In this formation all through  
20 that area. We have recommended in the MRP that if they encounter  
21 a flow of water, sustained flow of water in excess of one  
22 gallon per minute, that they monitor it, both for quality and  
23 quantity.

24 MS. LUNDBERG: But you haven't done any measuring,  
25 and neither has anybody else? And you haven't answered my



discrete

1 question as to what it will cost to measure it.

2 THE WITNESS: Well, what are you trying to measure?  
3 You are generally measuring quality and quantity. The quality  
4 of water is fairly expensive, depending on the types of tests  
5 you have run. The quantity is, you know, it's a matter of time  
6 having somebody do that. It doesn't occur at one discrete point.  
7 In other words, what would be the purpose for doing it?

8 MS. LUNDBERG: Well, it's one of the things the State  
9 would like to know, maybe, to provide the information, so that  
10 your application would be complete. That might be a--

11 THE WITNESS: I don't want to comment.

12 CHAIRMAN WILLIAMS: Any further questions?

13 Q (By Mr. Rothey) Mr. Wimmer, I understand you said that  
14 the MRP does include in it a commitment to the monitoring of  
15 water flows in the mine if they exceed a certain gallonage per  
16 minute, and I believe that is five gallons per minute; is that  
17 correct?

18 A I believe it's one.

19 Q One gallon per minute?

20 (Witness nods head.)

21 Q With respect to the water quality in the mine, is it your  
22 understanding and experience that that is generally used in the  
23 operations of the mine and is consumed wholly within the mine?

24 A Yes, I'm aware there is some periodic intermittent type  
25 discharges from the mine, but it is a minor amount.



1 CHAIRMAN WILLIAMS: Is the discharge less than one  
2 gallon per minute at this time? Is that your understanding?

3 THE WITNESS: It's a periodic discharge. At times  
4 it's probably more. It depends on how much they are using in  
5 the mine for dust suppression and so on.

6 CHAIRMAN WILLIAMS: Any further questions?

7 Q (By Mr. Rothey) Yes. With respect to the discharge in  
8 the perched water situation that would occur in a geologically  
9 fractured area, Mr. Wimmer, isn't it possible that you might  
10 get a flow of 50 or even several hundred gallons per minute for  
11 a short period of time and then have it cease altogether after  
12 that short period of time?

13 A Well, I think that would only occur if you were to, you  
14 know, cut through a fault where you had, you know, better con-  
15 ductivity. Otherwise, you wouldn't get flows of that type.

16 Q In fact, in perched water, by the time you could set up  
17 measuring devices, you may in fact find that the water has been  
18 completely bled out?

19 A Yes. We're talking about a sustained deal. Numbers in  
20 the MRP relate to sustained deals, where the flow keeps going.

21 Q Are you aware today of any sustained deals in the mine?

22 A I'm not aware of any.

23 MR. ROTHEY: No further questions. May this witness  
24 be excused?

25 CHAIRMAN WILLIAMS: Any further questions?



1 MS. ROBERTS: No.

2 CHAIRMAN WILLIAMS: Thank you, Mr. Wimmer.

3 MR. ROTHEY: Call Mr. Melvin A. Coonrod as a witness.

4 MELVIN A. COONROD

5 called as a witness on behalf of Co-op, having  
6 been duly sworn, testified as follows:

7 DIRECT EXAMINATION BY MR. ROTHEY

8 Q Mr. Coonrod, would you state your name and address, please?

9 A Melvin A. Coonrod. My address is P. O. Box 358, Elmo,  
10 Utah 84521.

11 Q Mr. Coonrod, can you tell me what your education is?

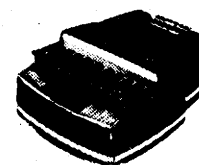
12 A I have a bachelor of science degree with a major in zoo-  
13 logy and a minor in chemistry from Weber State College, a  
14 master's degree from Utah State University in silviculture, a  
15 minor in environmental science with a secondary education cer-  
16 tificate.

17 Relative to additional education, I've attended the College  
18 of Eastern Utah and taken a number of classes. I've taken  
19 post graduate work at Utah State University, attended a number  
20 of seminars in professional organizations. I taught on a col-  
21 lege level.

22 Q What have you taught on a college level?

23 A The mine lands reclamation, permitting, at College of  
24 Eastern Utah in Price.

25 Q What is your work experience in the area of the mine land



1 reclamation, silviculture, and mine permitting in the State of  
2 Utah?

3 A I've had probably in excess of 15 years in the field of  
4 reclamation contracting and reclamation consulting. I worked  
5 for two years with Getty Coal as an environmental coordinator,  
6 at which point we were the second mine in the State of Utah to  
7 receive a permanent permit under the Act.

8 Q What were your responsibilities with Getty Coal in obtain-  
9 ing that permit?

10 A I was charged with assemblage, compiling data, assembling  
11 that data, and dealing with OSM at that time and the Division  
12 of Oil, Gas and Mining, the Utah agency, and permit approval,  
13 both in dealing with consultants and also collecting on site  
14 data relative to that permit approval.

15 Q Would that on site data collection process include hydro-  
16 logic data?

17 A The extent of my duties in the area of hydrology have  
18 been primarily spring and seep inventories and actual monitoring  
19 of spring and seeps, surface waters, and underground waters as  
20 they were encountered in the sequence of mining.

21 Q But in connection with your duties with Getty, as it  
22 related to the Plateau Mine application MRP, did you have total  
23 oversight responsibility with respect to that MRP?

24 A When you work for a company as large as Getty, I don't  
25 know that anyone has total responsibility for anything; but I



collecting

*1 with an / within*

1 believe my title was to--or, my charge was to oversee and get  
2 approval of the MRP. I certainly had superiors that oversaw  
3 how much money I was spending, et cetera.

4 Q What period of time did this include?

5 A I went to work for Getty--I have to look at a resume--  
6 January--or, I'm sorry--June of 1980. I believe our permanent  
7 program approval was in February of 1981. And I worked through  
8 January of 1983.

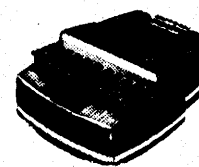
9 Q In connection with that approval, was the information re-  
10 quired in that MRP different in any material way from the in-  
11 formation that is required in the MRP submitted by Co-op?

12 A It's difficult to compare the two properties precisely  
13 with Plateau Mine. We were dealing with an excess of 6,000 acres.  
14 With Co-op we are dealing with approximately one-tenth that  
15 amount of ground.

16 The basic format and the information is in my opinion very  
17 identical, or at least very compatible. The extent of the in-  
18 formation, however, with Co-op, due to the relative size, is,  
19 of course, considerable less.

20 Q In what way is it less?

21 A For an example relative to drilling, a company with 6,000  
22 acres of reserves, in order to conduct mining in an orderly man-  
23 ner, does normally do a drilling program, not necessarily re-  
24 lated to hydrology, but more relevantly to coal reserves and  
25 quantity and quality of coal to project their mining.



Mine area for Co-op Mine.

1           And so Getty did in fact have, I believe, 17 drill  
2 holes on Gentry Mountain. Any information that was gleaned  
3 from those drill holes was then also applicable to the hydrol-  
4 ogy section. However, as I remember, that information was  
5 really of very little relevance and had little bearing on the  
6 hydrology section.

7       Q     All right. You say that Getty had a total mine plan of  
8 approximately ten times the area you find in Exhibits M and N  
9 here, the mine area for Co-op Mine?

10      A     That's correct.

11      Q     And in that space, they drilled some 17 holes. Were  
12 those bore holes or core drilling?

13      A     I am not a geologist. I know a number of them were in  
14 fact core holes, but I don't know the extent of all of them.

15      Q     Not all of them were core holes; is that correct?

16      A     I honestly don't know.

17      Q     In your professional opinion, based--well, excuse me.  
18 Besides the application with Getty, as it relates to the  
19 Plateau Mine, have you participated in the preparation and sub-  
20 mission of any other MRP's to the State of Utah or OSM as it  
21 relates to mines in the State of Utah?

22      A     Yes.

23      Q     What other applications have you participated in?

24      A     Direct total permit assemblage, I completed the Summit  
25 Coal permit application. I have worked--I have worked for



monitoring

1 almost every mine in Carbon and Emery County in one phase of  
2 their permitting or another, either dealing directly with  
3 reclamation, spring and seep inventories, wildlife monitoring,  
4 rafter surveys, which become part of their permits.

5 I worked on the stipulations relative to Skyline, which  
6 already had an approved permit while I was employed with Getty.  
7 I also worked with the State on the permanent--on their advisory  
8 committee when the permanent program--when the State was try-  
9 ing to get primacy.

10 Q To what extent did you work with the State in the develop-  
11 ment of permanent--

12 A I was on the Utah Coal Operators Regulatory Committee, and  
13 in that capacity--prior to that capacity I was on the Mining  
14 Advisory Committee of the Division of Oil, Gas and Mining as  
15 a representative of Plateau.

16 MS. ROBERTS: I don't mean to interrupt, but I'm not  
17 exactly sure how this is relevant to the issue of completeness;  
18 and I know that we should move along here.

19 CHAIRMAN WILLIAMS: Mr. Rothey, do you wish to  
20 respond?

21 MR. ROTHEY: No.

22 CHAIRMAN WILLIAMS: Is that an objection?

23 MS. ROBERTS: That is an objection. I object.

24 CHAIRMAN WILLIAMS: Overruled.

25 Q (By Mr. Rothey) Getting away from that, Mr. Coonrod, but





1 using that as a basis for your testimony now, in connection  
2 with the July 13, 1984, determination of completeness submitted  
3 to Co-op by the Division, have you had occasion to review that  
4 with Mr. Wendell Owen and the people at Co-op?

5 A Yes, I have.

6 Q In your opinion, are those deficiencies as noted in the  
7 July 13, 1984, letter deficiencies that go to the issue of  
8 completeness?

9 A In my opinion, the majority--the deficiencies are in fact  
10 either nonexistent or technical deficiencies.

11 Q With respect to the issue raised under UMC 783.15, Ground  
12 Water Information, why would you assert that that is a techni-  
13 cal deficiency, if it is a deficiency at all?

14 A The only way I can see--the only realistic way I can see,  
15 if more information is gleaned as per their request, is with  
16 the monitoring program which Co-op has committed to in the MRP.  
17 That monitoring program will be conducted over the life of the  
18 mine. Information will be gleaned in the first year. The  
19 base line data will be collected relative to the mine water  
20 flows. Quantity and quality, for example.

21 Q Have you encountered water in the mine in the operation  
22 under the interim permit?

23 A Yes. Virtually every mine in the state encounters some  
24 degree of water.

25 Q What has Co-op done with respect to that water?



1 A Co-op is presently seeking approval from the Division of  
2 Water Rights to utilize all of the water that they encounter  
3 in the mine for dust suppression and the conducting of mining  
4 and to be used in the bathhouse.

5 The reason we have a minor discharge at this time is that  
6 permit has not yet been approved, and that water which is dis-  
7 charging will in fact be used for outside dust suppression and  
8 in the bathhouse. I doubt there is sufficient quantity, how-  
9 ever.

10 Q Have you encountered any flows in the mine that are con-  
11 tinuous?

12 A There is an area in the mine in the old works which is  
13 what we believe to be a sump, and the water over the years has  
14 drained into that. And periodically there is water that flows  
15 along the floor. The area is unsafe, and it has been walled  
16 off as per MSHA's request. But periodically there is water  
17 that discharges from the old works.

18 Q I'm talking about continuous flows. Have you found con-  
19 tinuous flows in the mine, as opposed to periodic flows?

20 A The old works may be--no, I personally have not. There  
21 is water presently in the old works. It is always there.

22 Q You have heard my summary of the discrepancy as it relates  
23 to Exhibits M and N and as they bear on Exhibit L. Do you  
24 have anything additional to add to the description that I  
25 have given to the Board today?



1 A Nothing other than I obviously made an error.

2 Q With respect to Exhibits M and N, those maps have been  
3 submitted as part of this MRP; is that correct?

4 A That is correct.

5 Q As far as Co-op is concerned, they accurately define the  
6 boundary of the MRP?

7 A Yes.

8 Q With respect to Plates 3-4 and 3-3 in the MRP, do those  
9 plates show the location and extent of the Trail Canyon Mine?

10 A They show the location of the Trail Canyon Mine. They do  
11 not, however, show the extent of the mining. At the same time  
12 as we were permitting the Bear Canyon Mine, we have a written  
13 request of the Division that the Trail Canyon property be in-  
14 cluded as a modification to the Bear Canyon property. A letter  
15 to that effect is here. The Division requested that that modi-  
16 fication not be submitted until the permitting of Bear Canyon  
17 was complete. They had enough to do without additional data  
18 being supplied. For that reason, no additional information was  
19 supplied to the Division relative to Trail Canyon.

20 Q Have the detailed workings of Trail Canyon Mine been sub-  
21 mitted to the Division?

22 A There is an MRP presently in the hands of the Division which  
23 does in fact outline the detailed workings of Trail.

24 Q But that hasn't been specifically cross-referenced in the  
25 MRP as relates to Bear Canyon?



1 Bear

1 A There is--there is mention in the Bear Canyon MRP of the  
2 Trail canyon. I don't understand exactly--

3 Q I'm not asking you whether or not it is mentioned. The  
4 detailed workings in the MRP as it relates to Trail Canyon  
5 Mine have not been specifically included in the MRP in Bear  
6 Canyon Mine; is that correct?

7 A I believe that's correct.

8 Q The reason for that is your proposed inclusion of that  
9 data in this particular MRP was declined by the Division in  
10 favor of approving the MRP--approving or disapproving the MRP  
11 as it stands; is that correct?

12 A I don't believe that they have already declined it. They  
13 have simply asked us to defer it or postpone it.

14 Q All right. In the July 13 letter, there is a notation of  
15 deficiency as it relates to topsoil, substitute materials. Can  
16 you tell us what has been submitted as it relates to that and  
17 what your computations were as it relates to the amount of top-  
18 soil necessary for reclamation?

19 A Appendix 6S, I believe, details the methodology that we  
20 used to collect samples. We collected samples from the  
21 Campbell property, which you're familiar with, road cut mater-  
22 ial from the old existing road that led into the mine and up  
23 to the portal area, the existing topsoil pile.

24 The figures that we computed for topsoil volume was bas-  
25 ically the topsoil we had on hand that was collected at the



1 Bear Canyon site, the material that was along and adjacent to  
2 the old road, the pre-log road, where the soil was not removed,  
3 and the disturbed area prior to Co-op's involvement where we  
4 have to actually purchase soil and bring in to re-topsoil the  
5 area. For Mr. Hooper's information, the best soil we have  
6 available to us is in fact the Campbell property. The old road  
7 material is next best, and our present topsoil pile is in fact  
8 the worst soil on the area.

9 Q All of that information has been supplied?

10 A The actual test results have not been supplied. We have  
11 them; and as soon as this hearing is completed, I would like  
12 to give them to Ev Hooper.

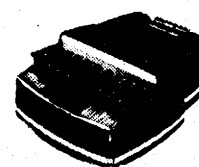
13 Q Do you agree with Mr. Hooper's computation of the amount  
14 of the yards that are necessary to complete the reclamation?

15 A I feel that Ev Hooper's total amount of topsoil or soil  
16 substitute material is correct, yes.

17 Q All right. It differs from what you have asserted in the  
18 MRP?

19 A No, it does not differ. In fact, we concur. The only  
20 difference is that I don't believe Mr. Hooper is--or, perhaps  
21 we were not clear in defining that a large portion of that  
22 soil exists in place on the mine plan area in the form of a  
23 road cut material and the area which has undergone interim  
24 reclamation.

25 In other words, the material is available. It's already



1 there.

2 CHAIRMAN WILLIAMS: You do agree that 8100 cubic  
3 yards will be required; is that correct?

4 THE WITNESS: Yes, I do.

5 Q (By Mr. Rothery) Mr. Coonrod, as it relates to 784.20,  
6 Subsidence Control Plan, has Co-op Mine requested of the  
7 Division that they supply hydrologic data as it relates to the  
8 general area?

9 A Yes.

10 Q Has that been supplied by the Division?

11 A No, but I'm still hoping. Northwest Carbon conducted some  
12 drilling above our mine property, which is of critical interest  
13 to us. We have requested in writing and on several times that  
14 those drill logs be made available to us so we can incorporate  
15 that information. Northwest feels that information is privileged.  
16 The Division has access to that. The USGS. All we're inter-  
17 ested in is the groundwater information, not the coal informa-  
18 tion. And if more information is necessary, they could look  
19 at the drill logs and tell us where and if any groundwater was  
20 encountered.

21 I can't understand their reluctance in not giving us that  
22 data.

23 Q Mr. Coonrod, in the space of time that you have been deal-  
24 ing with this particular MRP, have you dealt with more than  
25 one hydrologist at the division?



1 A Are you familiar with Dr. Zeus Bartholomew, where he takes  
2 off one hat and another one pops up? That's very much how I  
3 feel. We just about get a resolution with one individual, and  
4 then our personnel is changed who we are dealing with. I rea-  
5 lize that's probably not relevant, but, yes, I've dealt with  
6 three.

7 Q Three different hydrologists?

8 A Correct.

9 Q Has the emphasis of these hydrologists been different in  
10 any way?

11 A In my opinion, yes.

12 Q Has that created problems in completing the MRP as re-  
13 quired by the Division?

14 A In my opinion, yes.

15 MR. ROTHEY: No further questions.

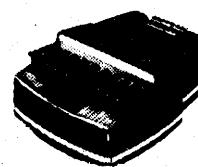
16 CHAIRMAN WILLIAMS: Do you have any questions, Ms.  
17 Roberts?

18 MS. ROBERTS: May I have a moment, please?

19 MR. ROTHEY: Mr. Chairman, I do have some additional  
20 questions as it relates to the prior testimony of Mr. Wimmer  
21 and questions asked by the Commission on the costs of the  
22 drilling program.

23 CHAIRMAN WILLIAMS: Go ahead.

24 Q (By Mr. Rothey) Mr. Coonrod, in your experience with Getty  
25 and the Plateau Mine, were you involved in the drilling program



1 to the extent of knowing the cost of the drilling program  
2 conducted by Getty Oil?

3 A I know that the drilling program on relatively level ter-  
4 rain, as we had on Gentry, was--would run to the \$500,000.  
5 On the terrain like we're dealing with at Plateau, I think that  
6 we would be in it well in excess of that amount.

7 Q You would be in it in excess of that for the Co-op permit?

8 A Yes. That's correct. For a single hole.

9 Q Why?

10 A We're dealing with the entire area, which is of conse-  
11 quence, with the exception of the northernmost boundary is very  
12 rough, steep, terrain, in excess of 70 percent sloped cliffs,  
13 ledges. To just get a road in, to get a rig in, would be  
14 extremely expensive, the reclamation of that road.

15 And I can speak to that. I'm confident it would be in  
16 excess of \$200,000, disregarding the actual drilling program  
17 and the cost of bringing in a rig. A helicopter rig you don't  
18 even consider for less than \$200,000 under any circumstances.

19 CHAIRMAN WILLIAMS: Could any drilling be done from  
20 within the mine?

21 THE WITNESS: The problem you have with an under-  
22 ground drilling program is you're confined by space of how  
23 long a drill steel can utilize the roof of the mine. Co-op,  
24 I would say, would have less than eight feet.

25 It could be done. I don't feel that--I don't know.





1 I don't know that much about it. I know that it could be  
2 done. You could drill a hole. How far--how relevant that  
3 would be, I have no idea.

4 CHAIRMAN WILLIAMS: Thank you.

5 CROSS-EXAMINATION BY MS. ROBERTS

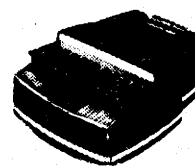
6 Q Mr. Coonrod, you testified to the effect that you have  
7 dealt with many hydrologists over the time that you've been  
8 working on the Co-op permit. In your opinion would the infor-  
9 mation required in 783.15 specifically, for example, the lith-  
10 ology and the thickness of the aquifers, change with the hy-  
11 drologist that was working at the Division at the time?

12 A At our first meeting, I felt, and I felt the hydrologist  
13 I was dealing with felt, that the groundwater was a moot issue  
14 relative to the Board's decision on a violation previous to  
15 that.

16 And at that point we felt we had that area addressed.  
17 Subsequently, when Mr. Munson became involved, it became a  
18 critical issue again. And I believe then with John Whitehead  
19 and--I didn't deal with John, but I believe Mr. Wimmer chatted  
20 with John and Tom together--it became a critical issue. And  
21 I guess now with Mr. Smith, it is again of considerable rele-  
22 vance.

23 Q Mr. Coonrod, when did Mr. Munson begin working on this?  
24 Was in 1982?

25 A I--again, I didn't actually--our consultants dealing



1 with the Division on hydrology. When I first became involved,  
2 we were dealing mostly with Mr. Darby, Dave Darby. And I  
3 think perhaps--I don't know what Tom's capacity was at that  
4 time--or, Mr. Munson's capacity.

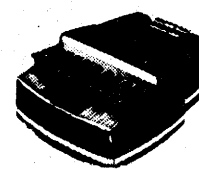
5 Mr. Darby left about six or eight months ago, I believe--  
6 or, didn't leave, but he no longer dealt with us on it.

7 MS. ROBERTS: No further questions.

8 CHAIRMAN WILLIAMS: Mr. Coonrod, can you describe the  
9 type of groundwater information that Getty submitted in addition  
10 to the information from the 17 drill holes?

11 THE WITNESS: I'm not trying to be evasive. It's  
12 been in excess of a year and a half. I know that we had a  
13 commitment in our MRP to monitor flows that we encountered, the  
14 same flows underground that endured for--don't hold me to these  
15 figures--I was thinking it was five gallons per minute that  
16 endured in excess of 72 hours, because in the mining sequence,  
17 as with Plateau, as we mine along we would hit water. We also  
18 had a number of springs and seeps. I believe we had 21 springs  
19 and seeps--on the Plateau property that we monitored monthly,  
20 quarterly, bianually, with both quantity and quality.

21 There were some platometers put down in the coal  
22 refuse pile, but that information was relative to stability,  
23 I think, more than groundwater. We had no wells at that time  
24 that we were monitoring, although our culinary water, our  
25 potable water at the mine was derived from an old well,



1 actually a gas well.

2 CHAIRMAN WILLIAMS: Was there any other information?

3 THE WITNESS: I'm sure there was--I would have to  
4 read the chapter to know, you know, to familiarize myself  
5 again.

6 CHAIRMAN WILLIAMS: What information was submitted  
7 to subsidence?

8 THE WITNESS: Plateau--I don't know if this is  
9 relevant--but Plateau had an agreement with the Forest Service  
10 where it was flown annually. We had survey subsidence markers  
11 set on about a 300-acre grid. And the air photo--the work the  
12 Forest Service did, they would photograph those and send us a  
13 report back saying, "No subsidence has occurred."

14 And we also would do a survey identical to the one  
15 that we've committed to with Co-op, where we would actually go  
16 up and visually observe the mine plan area, those areas which  
17 have the--where the pillars have been pulled and we would note  
18 the incidence of subsidence. We would map those and keep track  
19 of those as far as rate appeal. You know, photographs, supply  
20 the report to the Division annually, which we have committed to  
21 doing, and we have done one such survey at Co-op at this time.

22 CHAIRMAN WILLIAMS: Thank you. Any further questions?

23 MR. GARR: Yes. One. Mr. Coonrod, with respect to  
24 the drilling in the surface boundaries, would there be any  
25 of the surface drilling that might be necessitated should that



1 be decided, would any of that be on Forest property?

2 THE WITNESS: The entire permit area is fee property,  
3 I believe. I don't--

4 MR. GARR: But if you were going to do a drilling,  
5 a thorough drilling--

6 THE WITNESS: I have no idea what the Division wants  
7 in a drilling program, if they're talking one hole or 100 holes.  
8 They've never told us. I can't answer that.

9 MR. GARR: All right. Fine. Thank you.

10 CHAIRMAN WILLIAMS: Any further questions?

11 MS. LUNDBERG: Mr. Coonrod, in your experience with  
12 Getty and with other mining companies, is drilling information  
13 generally considered to be confidential by the company?

14 THE WITNESS: The information relative to coal reserves,  
15 especially on properties which are being traded for or sold or  
16 released, I have seen a good many of those classified as con-  
17 fidential, yes. And I know that a lot of Getty's information  
18 was kept confidential, the actual drill log information.

19 MS. LUNDBERG: In your experience, how do you suppose  
20 the company would view you as an employee if you disclosed  
21 confidential information to a competitor?

22 THE WITNESS: I doubt very much I would be employed  
23 for that company, to be very candid with you.

24 MS. LUNDBERG: If you provided confidential informa-  
25 tion to a state agency without providing it under a stipulation



1 confidential

1 of confidentiality, how do you suppose your status as an em-  
2 ployee would be?

3 THE WITNESS: I feel that the information could be--  
4 the groundwater information--would not be sensitive, and that  
5 the--and that I as an employee of the State could look at the  
6 information and form reasonable conclusions or gain information  
7 from it that I could use to evaluate someone else's permit  
8 without infringing on the confidentiality. The area of con-  
9 fidentiality deals with coal or gas reserves, and I don't think  
10 the companies are necessarily concerned about the incidence of  
11 water.

12 MS. LUNDBERG: I'm really more interested in your  
13 interests that other companies disclose the information to you  
14 in Co-op.

15 THE WITNESS: We think we are making headway. We  
16 have worked on that. I flew to Nevada day before yesterday  
17 with a member of Nevada Power, who now are the fee owners--or,  
18 the owners of that property. And they are requesting informa-  
19 tion from the BLM, who have a record of it. And they are hop-  
20 ing, now that they own the property, that that information will  
21 be released. If we can get it, we're going to give it to the  
22 Division. We have worked for in excess of two years to try to,  
23 you know, get all we want. It's just the groundwater informa-  
24 tion. I don't care about the coal, you know.

25 I do have a letter from Nevada Power, which we



1 received at that meeting, where they told me on the wild horse  
2 drilling program immediately adjacent to Co-op that they en-  
3 countered no groundwater. They didn't give me the drill logs,  
4 but they wrote me a letter, a statement to that effect.

5 MS. LUNDBERG: Thank you.

6 THE WITNESS: To answer your question, I realize  
7 it's a sensitive area.

8 MS. LUNDBERG: And really, the State can't waive  
9 confidentiality on behalf of the company?

10 THE WITNESS: I couldn't--I see your point.

11 MS. LUNDBERG: Thank you.

12 CHAIRMAN WILLIAMS: Any further questions? Ms.  
13 Roberts, do you have any questions?

14 MS. ROBERTS: No.

15 CHAIRMAN WILLIAMS: Thank you.

16 MR. ROTHEY: No further witnesses.

17 CHAIRMAN WILLIAMS: Do you have any rebuttal wit-  
18 nesses?

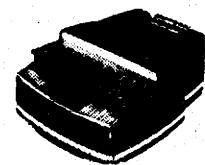
19 MS. ROBERTS: Can we take five mintues?

20 CHAIRMAN WILLIAMS: Very well. We will recess for  
21 five minutes.

22 (Recess from 9:02 a.m. until 9:17 a.m.)

23 CHAIRMAN WILLIAMS: Ms. Roberts?

24 MS. ROBERTS: Yes, I have one witness. Dr. Dianne  
25 Nielson.



1 DIANNE RUTH NEILSON

2 recalled as a witness on behalf of the Division,  
3 having been heretofore duly sworn, testified as  
4 follows:

5 DIRECT EXAMINATION BY MS. ROBERTS

6 Q Dr. Nielson, has the Division ever required a drilling  
7 program of any mining company?

8 A No. Excuse me. As part of--

9 Q As part of the Chapter 10 for the permanent program  
10 permit application?

11 A No.

12 Q What is the Division requiring for completeness in this  
13 particular area of groundwater hydrology?

14 A The Division is requiring that we have site specific--  
15 that we have site specific base line data upon which to pro-  
16 ceed to the technical analysis portion of this review regarding  
17 hydrology, groundwater hydrology, aquifers recharge, and related  
18 information to that system.

19 Q Is the Division requiring that that be obtained in any  
20 particular way?

21 A No, we are not.

22 Q If that should require a drilling program or not, that is  
23 not something the Division is getting involved in?

24 A No. The Division is not attempting to tell any operator  
25 how they must collect their data, and it's not the Division's



1 responsibility to outline a program of data collection for any  
2 operator. The Division is simply stating to any operator that  
3 it is necessary for us to make the findings as required under  
4 law regarding site specific information on groundwater hydrology,  
5 but that information must be a part of the mine plan applica-  
6 tion that we receive from the operator. It is the operator's  
7 option as to how to collect this data, but we must have this  
8 data, because we are required to make site specific base line  
9 data determinations as part of our permit approval.

10 Q Dr. Nielson, when did the Division first request this  
11 kind of groundwater hydrology information?

12 A The Division has consistently indicated that there is a  
13 deficiency in the mining and reclamation plan for DOC reviews  
14 of December of 1981, and this includes groundwater information  
15 requested and still found to be deficient under 783.13, 14, and  
16 15.

17 Q 783.15 is the one that still remains incomplete?

18 A That is correct.

19 MS. ROBERTS: I have no further questions.

20 CHAIRMAN WILLIAMS: Mr. Rothey.

21 CROSS-EXAMINATION BY MR. ROTHEY

22 Q Dr. Nielson, in your review of the MRP, you have been able  
23 to determine that Co-op has in fact been monitoring and is  
24 committed to continued monitoring of the Bear Canyon Spring?

25 A It's my understanding that Co-op has provided in the MRP





1 that they will conduct a monitoring program.

2 Q As I understand it, that spring is being fed by an under-  
3 ground aquifer from Gentry Mountain; is that correct?

4 A I don't have the technical basis for determining that.  
5 I'd have to refer that to another witness.

6 Q Has Co-op identified faults in the area of the mine plan?

7 A The maps indicated that they have identified faults within  
8 the mine plan area, yes.

9 Q Do you have the technical expertise to know whether it is  
10 highly probable that the groundwater regime would follow fault  
11 lines?

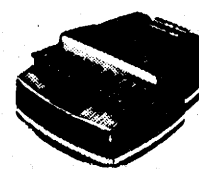
12 A This is a technical issue that has been reviewed by staff  
13 relative to completeness of information and technical deficiency,  
14 and I would prefer to refer any questions regarding the evalu-  
15 ation of that information to one of the technical witnesses.

16 Q So if I were to ask you a question about the strike of a  
17 fault and how it may impact upon the groundwater regime, you  
18 wouldn't be able to answer that?

19 A I could answer, but I am in no way to prepared to answer  
20 specifically with regard to Co-op's Bear Canyon Permit applica-  
21 tion.

22 Q But the identification of fault lines in the permit area  
23 would in fact bear upon the effects of groundwater hydrology,  
24 would it not?

25 A The occurrence of faults within the permit area would



1 certainly have an effect on the groundwater.

2 Q Would evidence from the State Department of Geology that  
3 the known groundwater in the area is not in fact interrupted  
4 by any faults on the Bear Canyon permit area, would that be  
5 relevant and helpful?

6 A Technical information which verifies statements regarding  
7 that would be useful.

8 Q Now, you are aware that Mr. Callister has identified a  
9 flow line of snowmelt and precipitation from Gentry Mountain  
10 done through the Star Point and then out to Bear Canyon Spring.  
11 Are you acquainted with that?

12 A I am familiar with the fact that he discusses that. I  
13 do not know that he has presented technical information, a  
14 written report, or any other substantial data which verifies  
15 that.

16 Q Would it be your opinion that the data with respect to the  
17 thickness of the aquifer that feeds the Bear Canyon Spring could  
18 only be gathered from information gathered off the site of the  
19 Bear Canyon Mine plan?

20 A I don't know, because I'm not familiar specifically with  
21 the extent, and I would, again, prefer to refer that to a  
22 technical witness.

23 Q But if it in fact required drilling, let's say, off the site  
24 of the Bear Canyon Mine, which would require the licensing or  
25 easements by others to Co-op Mine, then that would be an



1 economic consideration that the Division would be concerned  
2 with; is that correct?

3 A The Division has the responsibility for permitting drill-  
4 ing operations within the State of Utah. So, certainly the  
5 Division would be concerned from a regulatory point of view.  
6 The Division also has a concern with regard to any permit  
7 application that the information provided be sufficient for the  
8 Division to make a finding as required under law.

9 We appreciate that there are economic, as well as other  
10 considerations in collecting any type of data. We are not  
11 attempting to tell an operator what data he must collect. We  
12 are not attempting to put an economic hardship on that operator.  
13 We are simply attempting to indicate that before we can even  
14 determine a permit application complete, it is essential that  
15 it includes site specific base line data needed for us to make  
16 determinations as required by law; and we encourage the opera-  
17 tor to collect that information in the most efficient, effec-  
18 tive, technically acceptable, and economic manner possible  
19 through his consideration.

20 Q Would you be more specific about that?

21 A Perhaps--

22 Q Other than the fault line, for instance, or testimony that  
23 has already been given and presented in the MRP about perched  
24 waters within the mine and the testimony of Mr. Callister about  
25 the Bear Canyon Spring and how that may be recharged, what



1 specifically do you feel needs to be developed as far as the  
2 data base in order to provide you sufficient information to  
3 conclude that there would be no impact--or, in order for you  
4 to evaluate the impact on the hydrology of the region as a re-  
5 sult of the operation of the mine?

6 A Any specific--site specific base line data that would  
7 address any of that information you have outlined and any other  
8 site specific base line data on hydrology concerning the permit  
9 area would be accepted by the Division. At this point, we  
10 have no site specific base line data on any of those statements.

11 MR. ROTHEY: No further questions.

12 CHAIRMAN WILLIAMS: Ms. Roberts?

13 MS. ROBERTS: No further questions.

14 CHAIRMAN WILLIAMS: Mr. Rothey?

15 MR. ROTHEY: No further questions.

16 CHAIRMAN WILLIAMS: Mr. Owen, would you mind stepping  
17 up to Exhibit L, please.

18 WENDELL OWEN

19 recalled as a witness on behalf of Co-op, having  
20 been heretofore duly sworn, testified further  
21 as follows:

22 EXAMINATION BY CHAIRMAN WILLIAMS

23 Q Could you show us where Co-op is mining now and perhaps  
24 generally discuss the five-year plan?

25 A The mining I think is in this area in here (indicating).



1 Q That's just out of the permit boundary shown on Exhibit  
2 N? Is that correct?

3 A I was--

4 Q South of the green line on Exhibit L?

5 A We would have to make a survey to see if we are south or  
6 north of the permit boundary.

7 Q What about the area that's shown in the aquamarine color?

8 A There again, to know the extent of that, we'd have to make  
9 a survey to know for sure. But there has been some mining along  
10 the outcrop that is reasonable to assume is beyond the permit  
11 area.

12 MR. LARSEN: But all of the light blue is currently  
13 being mined, is that correct? All of this shape (indicating)?

14 THE WITNESS: This shape here?

15 MR. LARSEN: Yes. That's been mined out?

16 THE WITNESS: Been mined or currently being mined.

17 Q (By Chairman Williams) Is there mining going on now in  
18 the areas marked 1985, 1986?

19 A No. One thing that--as far as areas at the time, that  
20 there is a difference in development in retreat mining. In  
21 other words, just like this year, there--it is to be mined--  
22 let's see--

23 MS. ROBERTS: Yes. That's it.

24 THE WITNESS: I would question that--there might have  
25 been some misunderstanding as far as company intention and



*map/may*

1 engineering on this, in that development of a main corridor  
2 was intended to be first, and I think on the original one that  
3 I prepared--in other words, when they asked for projected min-  
4 ing to start with, I prepared the map myself because I felt like  
5 since it was company policy, I was as qualified as anybody to  
6 prepare it. And it was to a certain extent quite general, be-  
7 cause I don't know how you can make any more than a general  
8 evaluation of it. I mean, like right now, the economy is down.  
9 We're only mining at half speed that we were, say, two years  
10 ago because of the lack of sale.

11 So any projected mining has to be dependent entirely  
12 upon the economy and what we have. For that reason I did pre-  
13 pare a rather general one, and I think you will find that on  
14 that one I did show a corridor here running first.

*in the land*

15 Q (By Chairman Williams) Is that corridor being constructed  
16 now?

17 A Yes. It was temporarily halted at that point. And if we  
18 went down here at this point, because down here on this end,  
19 we are down closer to the point in the outcrop. There is no upper  
20 seam apparent.

21 And so we didn't want to get up here and start pulling  
22 pillars somewhere until we had a chance to do some exploring  
23 in the upper seam. Now, if and when we receive approval on  
24 this permit, at that point we have the intention of applying  
25 for an exploratory permit to go up and determine the extent

1 of the upper seam from the outcrop.

2 MR. LARSEN: You're practically on the surface at  
3 this point?

4 THE WITNESS: In other words, this is downhill.  
5 So there is not as much overburden here, and consequently,  
6 if there is anything in an upper seam to speak of, it does not  
7 occur at this point. And that was our reason for discontinuing  
8 this temporarily.

9 Q (By Chairman Williams) What area will be mined next?

10 A We will simply--in other words, in the mining sequence,  
11 because of the air flow that was developed here and because of  
12 the air flow and the direction you want your air to flow be-  
13 tween what we call the caved area and the incoming air, it's  
14 better to go in this direction here. So that's why any pulling  
15 against the outcrop is started here and brought in a semicircu-  
16 lar around this way.

17 So that will be continued there, excepting that at this  
18 point then, the development there would also be brought with it,  
19 which would considerably slow down the advance. But compared  
20 to what it was in a point like this here, because you would  
21 at that point bring everything back--

22 CHAIRMAN WILLIAMS: Thank you. Any further questions?

23 MS. LUNDBERG: I didn't understand your answer to  
24 Chairman Williams' question. There are areas marked 1985, 1986,  
25 1987. Are you presently mining in the area marked 1985?

mining  
↓  
close gap



1 THE WITNESS: That could possibly be. There again,  
2 when this was prepared, when we first prepared this five-year  
3 plan and the one that I prepared, it started here I think in  
4 19--either '82 or possibly '83, because at that time that's  
5 when it was, and that's when we started, and that's when the  
6 first five-year plan was projected. Now, in having the engineer  
7 prepare this, apparently he changed that, since it was 1984.  
8 And I would say that that probably was a technical error there  
9 in calling it 1984, when it in fact had been mined before  
10 1984.

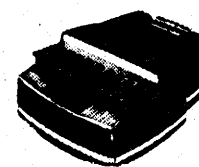
11 MS. LUNDBERG: So the area marked 1984 has been  
12 mined, and the area marked 1985 is being mined?

13 THE WITNESS: This part of the area as shown here,  
14 there is a barrier pillar here to correct this area until this  
15 part is taken care of. Then, like I say, you have this entire  
16 width in order to come back north the entire width, which makes  
17 it considerably slower progress here than it was coming around.

18 MS. LUNDBERG: Can you mine for five years at the  
19 rate you're currently mining and stay within the areas marked  
20 in pink on that map?

21 THE WITNESS: At the rate we're currently mining,  
22 yes.

23 MS. LUNDBERG: Now, how about the rate that you were  
24 mining when you said you were at half production? If you were  
25 at full production, could you mine at full production and stay





1 within the area marked in pink?

2 THE WITNESS: Yes. This--it started from the year  
3 that we actually started it.

4 MS. LUNDBERG: From now, if you were to get your  
5 permit tomorrow, could you mine for five years in the area  
6 marked in pink?

7 THE WITNESS: Like I stated, there is no way that you  
8 can divine an exact boundary of where you're going to be  
9 mining because of the fluctuation in the economy and the  
10 demand for coal and the number of other things.

11 MS. LUNDBERG: If you were mining at full production.

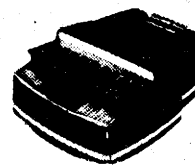
12 THE WITNESS: There again, full production is even--  
13 if we had the sale, we would open two sections; and at that  
14 kind of full production, no, we couldn't. Primarily we are  
15 mining in--we are running just one section. We were running  
16 two production shifts and one maintenance shift. We had to cut  
17 one production shift because of lack of sale. In other words,  
18 full production, then, one production shift, to the two-  
19 production shift, is the opening of another section? All  
20 this is--there is a lot of variables involved in projecting  
21 mining.

22 MS. LUNDBERG: Thank you.

23 CHAIRMAN WILLIAMS: Further questions?

24 EXAMINATION BY MS. ROBERTS

25 Q Mr. Owen, that map was prepared by whom?



1 A By Dan Guy.

2 Q By Dan Guy also. And submitted on what date?

3 A 4-27-84.

4 MS. ROBERTS: Thank you.

5 CHAIRMAN WILLIAMS: Any further questions from the  
6 Board? All right. Do counsel wish to make any closing argu-  
7 ments?

8 MS. ROBERTS: Yes, Mr. Chairman. I'll just make a  
9 few simple remarks.

10 I think it's fairly clear that the State has proven  
11 their case with regard to a violation or a breach of the con-  
12 ditions set forth in UMC 771.13(b) for continued mining without  
13 a permanent program permit.

14 The Division has proven the incompleteness of UMC  
15 sections that were listed in Exhibits H and I, specifically  
16 with groundwater. Co-op has presented no real evidence with  
17 respect to the site specific data. They simply restated that  
18 they have done a literature review on the regional area.

19 There is evidence that they are encountering ground-  
20 water that they might be utilizing in the mine. It may be  
21 being utilized outside the mine. The Division doesn't have any  
22 data on that. But it is clear that they have encountered  
23 groundwater to some extent. We have no information on the  
24 quality or the quantity of that groundwater that they have  
25 encountered, and that is something that is required by the



1 regulations.

2           With respect to the general requirements for maps,  
3 783.24, the Co-op has agreed that they have submitted contra-  
4 dictory boundary maps. With respect to the soils deficiencies,  
5 Co-op again agrees that no chemical analysis has been presented  
6 for the remaining amount of soil that is required to reclaim  
7 that particular area. And with the subsidence control plan,  
8 UMC 784.20, Co-op has presented no evidence showing that a  
9 survey of the renewable resources has been made and submitted  
10 to the Division with respect specifically to the recharge areas  
11 of the mine plan area and the adjacent area.

12           It is clear that the Division has been hindered in  
13 making its evaluations as required by law, thus essentially  
14 circumventing the definitive nature of the law.

15           The Division, therefore, feels it is entitled to an  
16 order terminating administrative delay, revoking the interim  
17 permit, and requiring cessation of all mining activities at the  
18 Bear Creek Canyon Mine except for any maintenance that may be  
19 required by the statutes and the regulations.

20           The Division requested such cessation order remain  
21 in effect until such time as Co-op has been issued a permanent  
22 program permit pursuant to Chapter 10 of Title 40

23           Thank you.

24           CHAIRMAN WILLIAMS: Mr. Rothey.

25           MR. ROTHEY: Thank you, Mr. Chairman.



1           As it relates to the question of groundwater  
2 hydrology--

3           CHAIRMAN WILLIAMS: Excuse me, Mr. Rothery. Would  
4 you speak into the microphone. Thank you.

5           MR. ROTHEY: The Division is here contending that no  
6 site specific information has been presented by Co-op as it  
7 relates to the present pending MRP as it impacts upon the  
8 groundwater hydrology in the area.

9           Counsel has conceded that a literature search has  
10 been done. That literature search indeed is a search of tech-  
11 nical literature which is compiled and based upon site specific  
12 information. That site specific information has been testified  
13 to both with respect to Mr. Wimmer's testimony, it has been  
14 included in the MRP as it relates to the findings of Mr. Wimmer  
15 and Mr. Callister. Indeed, the location of fault lines, site  
16 specific location of the spring, the annual rainfall informa-  
17 tion and precipitation and the snowmelt is included in the MRP  
18 is indeed site specific.

19           Mr. Callister's testimony is that snowmelt off of  
20 Gentry Mountain eventually migrates out into the Bear Spring.  
21 He has found, having been in the mine, according to his testi-  
22 mony, which is in the MRP, he has found no evidence whatsoever  
23 that that mining operation would in any way interrupt that  
24 flow to the Bear Spring.

25           We have given them a site specific report on the seeps



Existentialist  
Detail

1 and springs in the area. Indeed, we have found none. There  
2 has been no contention here by the Division that that informa-  
3 tion is incorrect or that they perhaps have information that  
4 there are other seeps and springs other than the Bear Canyon  
5 Spring.

6 For us to go out and gather nonexistent information,  
7 of course, would be futile; and based upon existentialist  
8 philosophy, it's impossible to get something that is nonexis-  
9 tent.

10 I would suggest that, contrary to the assertions of  
11 Ms. Roberts, that the provisions of 40-8-16, which I have pre-  
12 viously cited to the Board, and which I will not repeat in  
13 detail, have not been proved by the Division in this case, and,  
14 indeed, the continuation of the temporary permit again cannot  
15 be interrupted on the basis of what they have now suggested.

16 The failure to submit a plan, even if this Board were  
17 to find that the plan as submitted is incomplete, as opposed  
18 to technically deficient, does not fall within the parameters  
19 and guidelines set forth by the Legislature.

20 In the testimony of Mr. Callister, which has been  
21 included in the MRP, he states on page 66: "Displacement.  
22 We've measured in the mine displacements of 2½ feet, four feet  
23 two inches, and one foot three inches, in each case down to the  
24 east towards the canyon. And the strikes that we measured  
25 varied from north 8 degrees east to north 11 degrees east."



1           The strike symbol on Exhibit M shows a north 19 degree  
2 east strike.

3           The contention of the Commission is that that map is  
4 incorrect because, indeed, the strike should be going in the  
5 opposite direction. The testimony of Mr. Callister, who is in  
6 the State Department of Geology, goes on to conclude with re-  
7 spect to that strike--that is, the strike that is east of north:  
8 "Now, if that fault maintains its strike, it would not strike  
9 into the spring. An examination of the immediate vicinity of  
10 the spring reveals no trace of the fault, interestingly enough."

11           In terms of being site specific, I think that the  
12 Co-op Mine has in good faith gathered all available data from  
13 known experts, from known sources, including the USGS surveys,  
14 as well as information which they have attempted to gather from  
15 the Northwest Carbon Mine, and which they are now attempting  
16 to gather from Nevada Power, which would show that there has  
17 been no person who has encountered any significant hydrology  
18 or underground aquifers capable of significant recharge in the  
19 area, and in particular that the operation of this mine would  
20 in any way interrupt the flow of that water.

21           I respectfully submit to this Board that the  
22 Division is here today with their testimony admitting that there  
23 are 15 of 20 operators in the State of Utah still seeking a  
24 permanent program. According to the testimony of Dr. Nielson,  
25 every one of those operators would have been in existence at



1 the time of primacy. That would mean that every one of them  
2 would have had to have submitted, in accordance with law,  
3 their proposed MRP by March of 1981.

4 If we are talking about delays that occur because of  
5 the bad faith of Co-op, we have to assert that every mining  
6 operator in the State of Utah is equally guilty, because none  
7 of them, according to the testimony of Dr. Nielson, have been  
8 finally concluded. There has been some vague testimony that  
9 all of those are in the process of final conclusion; but it was  
10 clear in her testimony that each and every one of them had a  
11 designated date of completion and final approval prior to the  
12 designated date given to Co-op in the November 8 letter, and  
13 that date being July 27, today.

14 I respectfully submit to this Board that the Division  
15 is not here for the purpose of demonstrating bad faith, but is,  
16 rather, here for the purpose of flexing the Division's muscle,  
17 of asserting indefinite requirements against Co-op Mining, and  
18 that, indeed, each and every assertion which they have made is  
19 a technical deficiency, if it is a deficiency at all.

20 I believe that if the Board would consider what has  
21 happened since October of 1983, we received a 26-page DOC and  
22 TD on March 30. From that time we have reduced that down to  
23 one page, with the exception of the addendum. And in all of  
24 those determinations of completeness, one of them is clearly  
25 the soil issue, which is without any question a technical



1 issue.

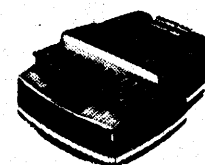
2 We are in agreement as to the number, the volume  
3 number of cubic yards of soil that must be supplied. We are  
4 in agreement that the technical data with respect to the soil  
5 analysis needs to be submitted. Our MRP specifically told them  
6 that that would be submitted as soon as it was forthcoming from  
7 the laboratory.

8 The other information I think flies in the face of  
9 the assertions of the Division. Indeed, the testimony of Mr.  
10 Wimmer and the testimony of Mr. Callister is as site specific  
11 as one can get without actually undertaking a drilling program;  
12 and Dr. Nielson is here asserting today that the Division is  
13 not requiring and has never required any operator to undertake  
14 a drilling program. Indeed, if we were required to undertake  
15 a drilling program, it would be at significant cost to this  
16 operator, and this operator, being the only independent mining  
17 operator in the State of Utah, could not bear that cost.

18 I would cite in conclusion the order of this Board  
19 of June 18, 1980. It says that:

20 "Evidence has demonstrated that no material damage  
21 to the hydrologic balance will be caused by the approval of the  
22 proposed notice of intent to mine."

23 The regulation cited by Ms. Roberts states that  
24 there must be a determination of the probable hydrologic con-  
25 sequences of the mining operation on the hydrology in the region.



operator (2nd)



1           This Board having made that conclusion, that evi-  
2       dence is not conclusive, as least as it relates to the issue  
3       of completeness.

4           CHAIRMAN WILLIAMS: Anything further, Ms. Roberts?

5           MS. ROBERTS: Nothing further, Mr. Chairman.

6           CHAIRMAN WILLIAMS: Very well. We have four addi-  
7       tional items yet to hear today. So we're going to take this  
8       matter under advisement, so that we can deal with those hear-  
9       ings. Following that, we will begin our deliberations.

10          Thank you all.

11          (Recess from 9:45 a.m. until 1:45 p.m.)

12          CHAIRMAN WILLIAMS: The Board has deliberated in  
13       Docket No. 84-040, the Co-op matter, and is ready to enter  
14       its decision, which has been unanimously reached. I'll give  
15       the decision in cursory form. It will be set forth in con-  
16       siderable more detail in the written order which will be pre-  
17       pared by Ms. Lundberg and myself.

18          The Board finds that it has jurisdiction under  
19       Title 40 of Chapter 10 of the Utah Code to hear this matter  
20       and to enter the following order:

21          The Board finds that the provisions relating to  
22       notices of intent issued under Chapter 8 of the Utah Code  
23       with respect to coal mines are superseded by Chapter 10.

24          The Board makes no finding with respect to the  
25       issue of burden of proof, having found that if the State has



1 the burden of proof, it has sustained it.

2       The Board finds that Co-op Mining Company's applica-  
3 tion for a permit for the Bear Canyon Mine to be incomplete in  
4 the following respects: The application is incomplete with  
5 respect to hydrological information required to be filed pur-  
6 suant to Regulation 783.15. The application is incomplete  
7 with respect to the requirements of Regulation 783.24. It re-  
8 quires filing of a map defining the permit boundary. The  
9 application is incomplete with respect to the requirements  
10 of 783.24, to require the filing of a map showing the loca-  
11 tion and extent of known underground mines.

12       The application is incomplete with respect to the  
13 requirements of Section 784.13(b)(4) regarding topsoil infor-  
14 mation and the filing of analyses of available topsoil. The  
15 application is incomplete with respect to the requirements of  
16 Regulation 784.20 regarding subsidence control plans.

17       The application is incomplete with respect to the  
18 requirements of Regulation 771.23(c) and (d) regarding the  
19 filing of information identifying the sources of some of the  
20 information contained in the application.

21       On this record the application is also incomplete  
22 under the requirements of 783.25 regarding strike and dip.

23       Having made those findings, the Board orders as  
24 follows:

25       The interim permit of Co-op is to be suspended and



*This/The*  
1 its authorization to mine withdrawn effective at 6 a.m.,  
2 Wednesday, August 1. This suspension will be lifted and the  
3 authorization to mine reinstated at such time as the Division  
4 of Oil, Gas and Mining makes a determination that the applica-  
5 tion of Co-op is complete. The Division is directed to review  
6 any information filed by Co-op in connection with its applica-  
7 tion diligently and within a reasonable period. The reinstate-  
8 ment of the interim permit will be for a period of one year,  
9 at the end of which Co-op can only continue to mine if it has  
10 obtained a permanent permit or if it is able to come to the  
11 Board and show good cause for an extension of the right to  
12 mine under the interim permit.

13 The Board retains continuing jurisdiction over this  
14 cause.

15 Now, you've heard the order. Are there any comments  
16 from the Board members?

17 All in favor of the order as I reported it say aye.

18 (Ayes.)

19 Opposed say no.

20 (No response.)

21 (Motion carried.)

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C E R T I F I C A T E

State of Utah )  
County of Salt Lake ) ss

I, Ronald F. Hubbard, do hereby certify that I am a  
certified shorthand reporter in and for the State of Utah;  
that I reported in shorthand the foregoing proceedings; that  
that this transcript is a full, true, and correct record of  
said proceedings.

Dated at Salt Lake City, Utah, this \_\_\_\_\_ day  
of \_\_\_\_\_, 1984.

\_\_\_\_\_  
Ronald F. Hubbard  
Certified Shorthand Reporter  
License No. 32

